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Jewell County Farmer's Institute.

[From Our Special Correspondent.]

Your correspondent, while not able to give the first day's proceedings in full on account of delayed trains, was on hand the last day and was agreeably surprised to find so large a number of Jewell county's best farmers vigorously discussing questions of importance to Kansas farmers. The Agricultural College was represented by Professors Ward, Shelton and Graham. The first day was devoted to discussing the culture of Carp. and Tame Grasses; and swine and their diseases.

The opening topic for the second day was "CATTLE; their Diseases and Cure," led by the popular and successful veterinarian of Northern Kansas, Dr. Marsh. The diseases of swine, he regarded more perplexing than those of any other live stock. They are subject to rheumatism, fever, and blood poisoning or cholera. The lungs, kidney and liver are easily affected, and promptness of treatment was advised; but prevention was still better. Diseases of swine are brought on by negligence, improper care and feeding. Hogs should have plenty of good bedding frequently changed, and should be fed on floors, or some suitable substitute, and not on filth. As a remedy for worms, ley was recommended.

"Black Leg" is a prevailing disease for one and two years old cattle, but he could easily cure it, or rather prevent the disease by vaccination. It is a blood disease and remedies given internally are not effective.

S. E. Wilson, Superior, Neb., stated that Shorthorns were preminately the best beef producing cattle; but for farmers of the Western range, he favored the Herefords, as better results were obtained from the crosses than with other breeds. Black Leg was the prevailing disease, but he had tried the vaccine inoculation, as a preventive, with the very best results. Milch cows troubled with garget had also been cured by vaccination.

Prof. Shelton said as to certain breeds being worthless was a mistake; it is only when the breed is removed from its proper element that the breed falls into bad repute. No one breed is suited for all purposes or every locality.

He stated that Herefords were generally poor milkers, but specifically they are grazers and generally very hardy and better "rustlers" than the Short-horns. But if you have shelter and feed, and do not expect them to rough it wholly, the Shorthorns are the best. The Angus are finer bred and less hardy than the Galloways. The breeds are very very fair milkers, and very good for crossing with other breeds. He recommended a trial of the breed for this section, provided you have plenty of money.

Prof. Graham spoke of the fungi and bacteria, and the effect on diseased animals; the fungi affecting plant and animal life, and this imperceptible something is found in food, water and air. The yellow fever and small pox are examples of bacteria. Good care of stock and any preventive was advised.

Mr. Pettigrew gave a talk on Horticulture. Most of the farmers of Jewell county, he said, if they had a garden, would plant corn in it. Gardening is attended with many difficulties, but should have good cultivation, pure seed and plenty manure. Asparagus, beets, turnips, potatoes, radishes, onions, &c., are an assured success. He advised every one to do some gardening.

In preparing ground for orchards use the plow and stir deeply; do not use the spade. He believed that pears can be raised success-



SARTHE

The Imported Norman Stallion Sarthe (No. 767 in the National Register of Norman Horses), Imported by E. DILLON & CO., Bloomington, Ill.

fully here and free from blight. He advised trimming trees in the dormant state as a general thing.

Prof. Ward gave a paper on Co-operation, defining co-operation and corporations and their objects and differences.

There are three societies of co-operation, viz: Societies of Credit; Societies of Production; Societies of Distribution. The latter is the most successful in this country. The advantages claimed were a saving of profits of merchandise, besides an assurance of an unadulterated article. This was best secured through co-operative stores. He mentioned the Grange Co-operative Society in Johnson county, at Olathe, Kansas, and the one at Manhattan. Four conditions are necessary for the successful operation of such societies. Members should be of similar pursuits and the same grade of society; members should attend all the meetings, and proper men selected for managers and officers; the manager should be a business man of unquestionable ability and integrity; the business must be conducted on a cash basis.

The advantages claimed for such stores are, first; It equalizes the accumulation of wealth by the distributions of profits, and thus tends to remove the antagonisms which exists between capital and labor; it trains all the membership to correct habits of business; the tickets that are given out at each purchase, compel a man to keep accounts, and to settle up quarterly; it stimulates men to be industrious and saving, for it furnishes the best possible investment for small sums; it tends to habits of economy and self-denial because it does away with the credit system. Persons who have no credit are obliged to practice the same self-denial as those who adopt the pay-as-you-go maxim. It promotes

peace and good will in a community, men becoming helpers of each other. It is truly educating in its tendency, both morally and intellectually. Men thus associated must regard each other's rights. They are called to exercise their best judgment, as they take part in the quarterly meetings of the association; they become acquainted with the laws of trade and the forms of business; it enables working men who have no capital to acquire it; to save without diminishing any comfort; to grow rich by accumulations of savings.

Farmers can co-operate in co-operative stores, by uniting their credit, and thus save two to five per cent; by uniting and buying the best male animals for improving their stock; by uniting in buying expensive machinery; by improving their roads to the principal markets.

The discussion of Corn Culture was the last but not the least important topic discussed because it is the principal crop of Jewell county.

Prof. Ward favored feeding the grain and shipping the stock to realize the best results. Mr. King thought the principal advantage of the listing process was the saving of time and labor in putting in the crop.

Sulky riding, and walking plows were discussed; also riding and walking cultivators. The majority favored the walking plows exclusively. One farmer stated that he could list and cultivate two acres to one in the old way. Last year he raised 4,000 bushels of corn from 100 acres, and only paid \$100 for extra hire in putting in and gathering the crop.

Crops are greatly increased by subsolling. Experiments showed an increase of 25 per cent in favor of drilled corn over other meth-

ods; also that an example of suckering part of a field of corn reduced the yield 8 bushels. The King Philip corn was recommended.

The session closed by a permanent organization of a Farmer's Institute. HEATH.

Hot Beds and Frames.

It would be well for those intending to make hot beds this spring to collect a pile of fresh stable manure. This, if protected from the Northwest wind will soon ferment, and the heat will permeate the whole heap. When the heat is up make a bed one foot wider all around than the frame, and one foot in depth, treading the manure solid in building the bed. Put on the frame, which should be made of boards one foot wide for the back, and nine inches wide in front. The width of the frame should be three feet. After the frame is in place cover the surface of the bed six inches deep with warm, pliable soil in which sow the seed in drills.

Using strong muslin instead of glass has the advantage of cheapness and less danger of breakage, but it is less perfect than glass. It answers well, however, for ordinary purposes. It is prepared by extending the cotton cloth a few inches beyond the frame, and being hemmed and provided with curtain rings a foot apart strongly sewed on, looped over nails outside the frame and drawn tight. A coat of the following mixture is then applied: Four ounces of pulverized rosin and one ounce of powdered sugar of lead, mixed with a quart of linseed oil sufficiently heated in an iron pot to dissolve and mix well together. This renders the cloth nearly transparent.

When the seed has germinated, abundance of air should be given, which can easily be done by folding the cover back one foot or more at the upper end of the frame. On very fine days the cover can be withdrawn altogether, the object being to grow stout, sturdy plants and not spindle shanks. When severe weather occurs, as it often does, extra covering with old carpet or some other thick material should be used. With a little care and attention the merest tyro will succeed in raising an abundance of early cabbage, tomato and sweet potato plants to furnish an abundant and early supply for a large family. Try it, and prove the correctness of these statements.

J. W. ROBSON.

From Anderson County.

Editor Kansas Farmer:

We have had a very hard and snowy winter. The thermometer has been as low as 18 degrees below zero. The ground has been covered with snow for about two months, just the thing for the wheat. There was not as large an acreage sown last fall as there was in the fall of 1881; what was sown looked well as the winter set in; can not say how it will look after the frost gets out of the ground, but we are all in hopes of a big crop. Stock of all kinds are in excellent condition; nearly every farmer will have more feed than he can use. They begin to see the folly of not having enough feed to carry them through till spring.

Our county has been bothered a great deal with mad dogs; many a farmer has had to kill from one to five head of cattle and other stock. I would like to see a law passed by our legislature compelling every dog in the state to be killed; we would then get rid of mad dogs.

J. S. N.

Garnett, Anderson Co., Kas.

PROCEEDINGS

Of the Kansas State Cane Growers and Manufacturers' Association.

In response to appointment, this Association met at Odd Fellows' Hall, Topeka, February 21, 1883, at 2 p. m. The President, R. M. Sandys, being unable to attend, on motion of Hon. H. C. St. Clair, Mr. X. K. Stout, of Doniphan, was called to the chair, and W. E. Fosnot, Assistant Secretary, acted as Secretary. It was stated by the Secretary that this was the first annual meeting since the Association was organized in 1881.

The names of the original members are as follows: E. M. Rugg, M. R. Smetzer, W. P. Clements, John D. Collett, W. G. Paddock, G. W. Chapman, W. E. Fosnot, A. E. Sample, M. S. Kimball, Thos. Montford, Wilson Keys, J. G. Evans, J. A. Stairs, W. L. Brown, J. C. Seward, R. F. Bond, John Bennyworth, G. W. Hollinger, C. D. Ulmer, E. B. Cowgill, H. S. Goss, R. M. Sandys, H. C. Bates, J. V. Brinkman, L. Swartz, E. E. Holbrook, Benjamin Franklin.

On motion, it was ordered that the Secretary act as temporary Treasurer. The following named persons then gave their names and paid membership fees—twenty-five cents each: X. K. Stout, Doniphan county; H. C. St. Clair, Sumner; E. M. Kallach, Franklin; O. W. Hawk, Butler; Wm. Sims and W. A. Peffer, Shawnee; Olof Ellison, Sequoyah; J. D. Jaqueth, Lyon; G. S. Burt, Wabunsee; J. F. Babbitt, Brown.

The Kansas Sugar Refining Company, of Hutchinson, was represented by Mr. O. Ellison, of Garden City, Sequoyah county.

On request the President made some statements concerning his experience with sorghum. He has been raising sorghum cane several years, and though he made twenty-five pounds of sugar two years ago, he is of opinion that the best use of the cane among Kansas farmers in the future will be for feed. He regards one acre of cane worth as much as three acres of corn. Kentucky farmers use it in raising stock. In sorghum the stock men will find a feed which is not excelled by corn for fattening qualities and as a crop is the surest one that can be raised. Cattle will winter on sorghum and come out looking as if they had been fed on blue grass. He uses the Barlow corn planter for planting the seed. He thinks sowing broadcast is better if feed alone is the object. Two crops may be cut in one season—the first about August 1st, with mower.

Mr. Fosnot stated his observation among farmers was that they generally preferred to plant same as corn only thicker, to which the President responded that he believes that the better way, if one has sufficient help to perform the work. He made 16,000 gallons of sirup last year and sold it at an average of forty cents per gallon.

Mr. Ellison asked about growing cane on sod. Fosnot replied that he had raised cane on fresh sod. He sowed on two acres and made 102 gallons of sirup from the cane.

Col. St. Clair began working with sorghum some years ago. He planted less than one-fourth of an acre on sod chopped in with a spade, hills two and one-half feet apart, four or five stalks in a hill. The cane grew about twelve feet long, and he received for his share (one-half) thirteen gallons of sirup. He has raised some every year since. He is now raising cane for feed.

Mr. Hawk said he has seen heavy crops of cane raised from sod. The largest crop he ever saw was from broadcast sowing. He would plant thicker than most people do—would put hills about two and a half feet apart. His first experiment showed that the earlier

planting was longer in maturing than that planted later. If clean cultivation could be secured, drilling would be better than hilling. It must be kept clean of weeds. The difference seemed to be that early sowing required more care and more room to cultivate, therefore rowing was best. The later the sowing the more rapid the growth, and the cane outstripping the weeds did not require so much working and a better yield was obtained by broadcast sowing.

The earliest planting known—April, was found to mature in ninety days. Plantings a month later matured in sixty-eight days, and that planted in the latter part of June in forty-five days. He preferred drilling to hills if weeds could be overcome. He planted six seeds to the hill, eighteen inches apart. This was too thick for sirup. Two feet was about the right distance. The best cane for results was of medium size and the wider the hills the larger the cane. The best cane and largest yield he had found to come from that distance. He thought there ought to be six seeds to the hills three feet apart, and not more than three when eighteen inches.

Mr. Ellison thought that by successive plantings and cuttings the sorghum season could be lengthened to about one hundred days. He believes that the later grown cane is best, but fall frost is in the way.

Mr. Stout said that usually cane planted in June will mature as early as that planted in May.

The question as to whether cane can be kept over winter was answered by Mr. Stout, who said he could now show cane in good condition. The time when the cane had arrived at its full strength was the best alike for sirup and for feed. As feed, some of the nutriment was wasted by curing, but substantially all of the valuable qualities were retained through the winter. He advised that sirup be always put in new barrels. He uses the bagasse burner—can use a forty feet pan with it. Had a thirty-three feet pan, and a forty feet flue, and often saw sparks coming out at the top. Thinks heat is the best defecator. Used lime in 1881, but did without it in '82, and had good sirup, but lime is needed in making sugar. He uses the Smouse pan. Some persons gauge sirup by the eye alone without any scientific tester. Has crushed cane with leaves on—saw no difference in the sirup. Sold his sirup readily at forty-five cents. Average sirup was 125 gallons per acre on good land. Net profits about fifty per cent. Skimmings may be made into vinegar and may be fed to hogs. Raised hogs last year on cane seed alone till within a month of marketing them. Hogs will eat all the substance out of cane. Cattle ought not to eat what the hogs have thrown away. Thinks sugar making can be made profitable in Kansas. Thinks we can raise all the sugar in this country that we need. If the tariff should be taken off of foreign sugar it might injure us some.

Dr. Minnick stated that we import more sugar (in money) than we export wheat. They make sugar at Champaign, Illinois, as certainly as millers make flour from wheat. He also stated that 465 pounds of sugar and forty to fifty gallons of sirup was an average per acre of all the Champaign work in 1882, and there were many difficulties in the way. On a special field of 12½ acres the yield was an average of 768 pounds of sugar and 116 gallons of sirup per acre. The sugar was worth eight and a half cents per pound, and the sirup was worth forty cents per gallon. The net profit on the 12½ acres was \$742.57. (That is \$59.40 per acre.)

Mr. Burt uses the Cook evaporator. Has made sirup several years. Thinks

there is more money in sirup making than in any other industry in Kansas. Has no difficulty in selling all he can make. He plants thick one way. Don't think the largest cane makes best sirup. Favors medium sized stalks. Raises the "Red Top"—Imphee. Made one year an average of 300 gallons to the acre. Has not succeeded so well with Amber cane. Thinks it ripens too early for our seasons.

Mr. Ellison said upwards of 400 barrels of sirup were made at Hutchinson last year, and 1,800 at Sterling. The price was as high as ninety cents a gallon. He further said that about \$250,000 were now invested in machinery for making sugar in Kansas. He named Sterling at about \$75,000, Hutchinson, \$100,000; Ellsworth, \$30,000, and the new works at Kinsley will be about \$15,000.

Mr. Hawk said cane seed meal makes excellent flour, to which the President responded—"I can hardly tell it from buckwheat."

Col. St. Clair thinks if we can raise the sorghum and utilize every part of it—make the sirup and ship it to refiners, and clear \$20 per acre of land, every farmer is interested in learning how to refine the sugar, so as to make all the profits at home. Is rejoiced to know that the sugar question for Kansas is settled. Thinks the time is near when we can make all the sugar we need. Thinks there is more in sorghum for the farmer than in wheat and corn.

The Colonel then gave a prepared statement showing average cost of production with gross, and net profits on an experiment crop of thirty acres in 1882. Cost of raising one acre cane, \$9.50. The yield was nine and a half tons per acre, and cost of manufacture into sirup \$1.00 per ton. Average product one hundred gallons sirup, which, at forty cents per gallon gives:

Gross profits.....	\$ 40.00
Expenses.....	19.00
Net profit per acre.....	21.00
Net profit on thirty acres....	630.00

By selling the cane at \$2.50 per ton the net profit would be \$11.75. (The average net profit on wheat and corn does not exceed \$7.50 per acre in this state.)

Cost of building and all necessary machinery, mill, pans, bagasse burner, etc., for working up the cane in the foregoing thirty acres experiment, \$800.

This is only \$70 more than the net profits on one crop of thirty acres, and this does not include the seed, which would a good deal more than cover the \$70.

Prof. Scoville, Chemist, of the Illinois Agricultural College recently visited Sumner county in the sorghum-sugar interest, and a committee have gone to Champaign, Illinois, to inspect the sugar works there. It is proposed to raise a company with a capital of \$25,000 in Sumner to make sugar.

The Colonel closed his address with these words: "From what I know of the sorghum plant, I am led to believe that it is the most profitable crop a farmer can raise. The seed, fifteen to twenty bushels per acre, is worth as much as corn to feed stock."

Mr. Babbitt's first experiment began last spring. Put in about \$4,000. Began late, and could not do much, but proposes to make sugar this year. Wants to know whether sugar can be made without the vacuum pan, boneblack, etc. Wants to see a sugar establishment in his neighborhood. Has faith in sugar making. If he can make three pounds from a gallon, that is good pay. Thinks there will be a boom in Kansas on sorghum soon, because among the safe crops in Kansas sorghum is one, and people will go for what is safe.

Dr. Minnick stated that cane grows well in Ellsworth county. Sugar works

are soon to be established in Kinsley, in Edwards county.

Mr. Hawk says frost affects the color of sirup. When cane is cut just as frost is approaching the color of sirup is lighter.

Adjourned to meet next day at 9 a. m.

THURSDAY MORNING.

When calling the Association to order, the President stated that Prof. Swenson, Chemist, of the Wisconsin State University, was present, whereupon the Professor was unanimously requested to "talk to us."

Professor Swenson is a Norwegian by birth, a modest young man of rare culture who uses our language with as much ease and fluency as most of our homebred collegiates.

He gave a brief history of experimenting in sugar making under his supervision on the Wisconsin experiment farm. The Legislature appropriated \$4,000 for the purpose four years ago. The object was not so much to test the matter from an economic standpoint as to demonstrate it in practice. The question was—Can sugar be made from sorgho; how, and in what quantities?

The question as to making sugar from sorgho is satisfactorily answered, and with as much certainty as the making of flour from wheat. The best results of their first year's work was 997 pounds of sugar per acre, besides the sirup left from draining. The cane yielded twelve to fifteen tons per acre. Next year was not a good season for cane. Only six tons to the acre were raised, and that yielded seventy-six to eighty-six pounds of sugar and live to eight gallons of sirup to the ton. The cane was crushed in an ordinary cane mill. About six pounds of sugar were made from every gallon of sirup, and then there is always some molasses left after draining. They used lime in defecation.

At this point, the Professor kindly suggested that perhaps his time could be made more profitable if persons present would ask questions upon points of special interest to them; and from that time forward for at least two hours he was subjected to a continued series of questions which he answered as only a practical expert and cultivated gentlemen could do. Here is a brief synopsis of what he said:

Lime is necessary in the manufacture of sorghum cane sugar, and its use improves sirup. The quantity to be used varies with the different conditions of cane. Acid, glucose and grape sugar exist in all the cane, but not in the same proportions always. Juices raised on different kinds of soil have different proportions of acid. Heat changes the acid into glucose. Lime neutralizes the acid, and when too much lime is used, sulphur fumes are applied, producing a sulphurous acid which is evaporated by heat. In applying lime it is better to fill the vat about two-thirds full of fresh juice, then pour in the lime water and stir well so as to thoroughly mix it with the juice. The lime water is made from fresh lime. It must be thoroughly strained so that there will be no lumps or solid matter of any kind in it. Use the water in its whitened, creamy form, not simply the clear water after all the color has gone to the bottom. There is no rule as to quantity. That must be ascertained by tests. Use litmus paper. Glucose is alkaline; acid is the opposite. Alkali will change red litmus paper to blue; acid will change blue to red. After mixing the juice and lime water, take a bit of the red or yellowish red litmus and draw it about through the liquid with the hand a few seconds so that it comes in contact with the juice in different places; then remove it and note the change of color. The degree of change will indicate the degree of glucose. Then try the blue paper the same way and its change of color will denote the acid. If the change in either case is great, the sirup is not in proper condition for sugar. If there is too much acid, put in more lime water and stir; if there is too much alkali, put in more juice. When the condition is perfect, there is no change in the color of the paper. This perfect standard may not be obtained absolutely, but it may be relatively. It is better to leave the juice slightly alkaline, rather than slightly acid, when sugar is the object. Success in making sugar depends upon proper defecation, and this neutralizing of the acid and al-

kali is defecation. It seems impossible to make sugar without it. If sirup contains half cane sugar and half glucose it will not produce sugar. Never add lime water when the juice is hot. Let the defecation be done when the juice is fresh and cool, then heat. Prefers the vacuum pan for sugar. If open pans only are used it is better not to attempt sugar making. After the heating (boiling) is completed, cool as rapidly as possible. If very hot sirup is confined it burns. Boiling sirup is hotter than boiling water, because evaporation cannot be so rapid. In the vacuum pan juice boils at lower temperature than it does in an open pan. Prof. Weber, at Champaign, Illinois, limed the raw juice, then ran it into a tight defecator. If old casks are used for fresh sirup, burn them out first with sulphur. Glucose is made of starch. Cane juice often contains a good deal of starch. Thinks cane ought to be used up soon as possible after cutting to make sugar; for sirup it is not so important. Recommends that farmers generally make sirup only and let the refining establishments make the sugar. There is so much practical chemistry that none but experienced persons ought to go largely into sugar making. Central factories ought to be established at places convenient to the farmers, and these, in charge of skilled workmen, would make more profit for the farmers than they themselves can make as a general thing. Let the farmer make the sirup and take it to the factory for refining.

Mr. Swenson proved to be exceedingly serviceable to the Association, for most of the members were needing and wanting just such information. [We will state here, parenthetically, that Prof. S. has been employed by the Hutchinson, Kansas, Sugar Refining Company to superintend their works. As soon as his present engagement at the Wisconsin University terminates—March next, he will come to Kansas. He thinks this soil and climate much better adapted to sorgho than Wisconsin. —Editor KANSAS FARMER.]

Upon the conclusion of his catechism, Mr. Pfeffer, editor of the KANSAS FARMER, offered the following resolution which was unanimously adopted, and he promised to see that a copy was placed in the hands of the Chairman of the Committee of Ways and Means in the House immediately:

Resolved, That this Association respectfully request the Legislature now in session to make a reasonable appropriation for the purpose of experimenting at the Agricultural College in the manufacture of sirup and sugar in Kansas from sorghum cane.

Mr. Pfeffer then stated that, in his opinion, sorghum growing would soon become a leading industry in the state, and he proposed to make the KANSAS FARMER a reliable medium of communication with the people on this subject. He wanted all the help he could get, and requested every member of the Association to aid as much as possible. Whereupon Hon. H. C. St. Clair moved that the KANSAS FARMER be declared the organ of the Association, and that every member consider himself a committee of one to help the good work along. The motion was amended to include the *Rural West*, and was carried enthusiastically.

Mr. Olof Ellison then presented an address that had been prepared by W. P. Clement, of Rice county, on the

THE SUGAR CANE INDUSTRY IN THE ARKANSAS VALLEY.

As a field for the sugar industry, Southwest Kansas commends itself to the attention of farmers and manufacturers as no other Northern state can do, because it possesses a soil and climate more perfectly adapted to the growth of cane. Our experiments, and beyond these our successful production of sirup, and of sugar on a limited scale, extending over a period of two years, afford a matter-of-fact guarantee that makes its own showing. There are six sugar mills in the Arkansas valley, and they represent a capital of \$200,000 invested in the business. Their concentration in this place was no accident. They were established by practical men who, it may be safely assumed, had traveled the country over in search of the most suitable natural conditions before deciding on a location. The results achieved have, I think, justified the choice.

Kansas is primarily an agricultural state. It grows every crop that can be cultivated in a temperate climate. Far enough South to avoid the rigors of a Northern winter, it enjoys an open cold season, neither long continued nor inconvenient. The working days in each year certainly number three hundred. The summers are warm and dry; the atmosphere is clear; the soil warm and light, at least in the Southwestern counties where the sugar factories are located—conditions exactly suited to the growth and maturing of amber cane.

There is a marked peculiarity in the distribution of rainfall over different sections of Kansas. In the far west the climate is dry to excess, in the middle belt of counties there is more rain, though by no means enough for many crops, while the eastern third of the State has a copious fall of moisture during the growing months of

spring and summer. Now, it is a fact that cane thrives best in a comparatively dry region, and we find that the peculiar conditions of atmospheric dryness which prevail in the Upper Arkansas valley promote a growth of rich cane giving higher tests of saccharine strength than have been shown by any Northern state. The working average for the past season as reported by the factories here is 10° B. some testings reaching 13° and even as high as 14°. This strength of juice represents, of course, the comparative value of the cane for sirup production, and is one very strong argument in favor of Kansas as a field for the sugar industry. One factory reports a working average of 12° B., the analysis manifesting an exponent of 75 per cent., or the equal of the ribbon cane of the South.

The soil is a light loam better suited to cane than the strong soil of bottom lands, which, while promoting a rank growth of stalk, imparts foreign elements to the juice, rendering its test low and its working difficult. Thus free from soluble salts it yields better returns as a productive loam for cane than the deeper and richer deposits. The chief difficulty in the way of successful manufacturing has hitherto been in eliminating acids and gums from the sirup. In Kansas nature has clarified the cane juice to a degree rendering defecation easy. The sirup produced has none of the rank vegetable taint which is an insuperable objection to the juice extracted from sorghum in most other localities.

It is remarkable with what ease and certainty the culture of cane is carried on in this valley. The farmer puts his first seed in the ground about the first of April; it germinates quickly in the warm earth, making a strong plant which pushes on to maturity with the rapidity characteristic of all Kansas crops. It has always been a problem among northern growers how a thrifty stand of cane could be secured in their strong moist soil, where the growth of the young plant owing to climatic severity, is backward. There is no difficulty of this kind to be encountered in Kansas. While in northern latitudes the farmers are still uncertain about the fate of their seed, the sorghum fields of South Central Kansas are green with the vigorous blades of the young crop. Thus it happens that the sugar manufacturer is enabled early in the season to judge of the prospects of a yield, and make early arrangements for working up the cane. The season for planting extends from the first of April to the first of July, and seed is planted at any time between these dates with the certainty of making a crop with this range of season double that of other localities. A large acreage is assured, and the harvest is graduated over a number of months, enabling the farmer to handle without loss a large amount of cane and keep a constant supply at the mill. It is possible, too, by planting early in the season, to bring Honduras cane, which requires a five months' growth, to maturity. Although by far the larger part of the cane planted is of the amber variety, the Honduras yields three times as many tons to the acre, and the possibility of its growth in Kansas is certainly worth noting.

We come now to another side of the question, and one which appeals alike to the technical and non-technical mind, namely, the length of the working season. It goes without saying that the longer the time during which manufacture may be prosecuted in each year, the greater the success of the industry. In Southwest Kansas we reckon with a certainty on 90 working days, or as has been already said, double that of any other locality with which we are acquainted. About the middle of July the early planting is ripe and ready for the mill. This date is worth fixing in the mind, as elsewhere the commencement of the working season dates from 30 to 45 days later. And it need not be pointed out that a working season of twice the duration of any other gives producers twice the advantage in production and profit. Who will say that this is not a substantial, indeed an unrivaled, inducement to capital?

The exceedingly warm and dry weather of the midsummer months during which our sirup making is at its height, besides hastening the growth of the cane and storing it with abundant juice, assures also an important saving of money and labor. It converts the bagasse into perfect fuel in twenty-four hours; and with so great certainty can the dry atmosphere of this section be depended on to do its work throughout the summer season, that no other fuel is needed in the operation of the factory. The same labor that would elsewhere be required to remove the bagasse from the mill, here suffices to return the waste to the furnaces, practically removing all expense of fuel. The saving in this item alone amounts to 50 per cent of the expense of operating where coal is used, in addition to effectively and immediately disposing of the waste. Bagasse is a better fuel than either wood or coal. It ignites quicker and makes steam faster. We should not be willing to exchange it for coal or wood delivered at our door. It has a certain value, it is well known, as a raw product for the manufacture of paper, but it is more valuable to us for our furnaces.

In common with the rest of the State, the Arkansas valley counties possess abundant marketing facilities. Kansas is located between two constant and insatiable consumers—Kansas City to the East, and the whole Rocky Mountain territory to the West. The railroad makes profitable shipping rates to these points.

Nothing is now required to make Kansas the leading sugar making State of the Union but additional capital for the introduction of new machinery and the extension of plant already established. The State has a soil and climate so perfectly adapted to cane growing that it cannot be long before this additional power will be felt, and we believe that competition from other States will then be impossible. Sugar from sorghum is no longer an experiment in this valley, and we have been making sirup for two years. The prestige of what is achieved is not to be gainsaid, but it is also to be remembered, in comparison, that our cane ripens sooner, is a surer crop, that we can work more days in the year, and that we pay nothing for fuel.

The present outlook justifies an opinion that the capital now invested in the business in Kansas will be largely increased during the coming year.

The following named gentlemen were then elected officers for the ensuing year: President, X. K. Stout, of Troy, Doniphan county; Vice President, Dr. A. G. Minnick, of Ellsworth, Ellsworth county; Secretary, W. E. Fosnot, Ellsworth county; Assistant Secretary, E. M. Rugg, Marion, Marion county; Treasurer, W. A. Pfeffer, Topeka.

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, \$2.50 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

Cattle.

H. H. LACKEY, Peabody, Kansas, breeder of Short-horn cattle. Herd numbers 100 head of breeding cows. Choice stock for sale cheap. Good milking families. Invites correspondence and inspection of herd. Satisfaction guaranteed.

PICKETT & HENSHAW, Plattsburg, Mo., breeders of the Oxford, Princess, Benick, Rose of Sharon, Wiley, Young Mary, Phyllis, and other popular strains of Short-horns. Stock for sale. Plattsburg is near Leavenworth.

F. DORAN, Bunston, Cooper Co., Mo., breeder of SHORT-HORN CATTLE, COTSWOLD, SHROPSHIRE and SOUTH-DOWN SHEEP.

BUCKEYE HERD, S. T. Bennett & Co., Safford, Kansas, Breeder of Short-horn Cattle. YOUNG BULLS FOR SALE.

L. PALMER, Sturgeon, Missouri, Breeder and Importer of THOROUGHBRED SHORT-HORNS. Stock for sale. Mention "Farmer."

OAKLAND STOCK FARM HERD, W. S. White, Sabetha, Nebraska Co., Kas., Breeder of SHORT-HORN CATTLE. Young stock for sale.

OAK WOOD HERD, C. S. Eichholtz, Wichita, Kas., LIVE STOCK AUCTIONEER, and Breeder of PURE BRED SHORT HORN CATTLE.

Cattle and Swine.

W. W. WALTIRE, Side Hill View Farm, Carbonate, Kas., breeder of Thoroughbred Short-horn cattle and Chester-White pigs. Stock for sale.

GUILD & PRATT, Capital View Stock Farm, Silver Lake, Kas., breeders of THOROUGHBRED SHORT-HORN CATTLE, and JERSEY RED SWINE. Spring Pigs for sale in season. Jersey Red Swine a Specialty. Correspondence solicited.

D. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of Pure-bred Jersey Red Hogs and Short-horn Cattle. Send for circular.

CHAS. E. LEONARD, Proprietor of "Kavenswood" herd of Short-horn Cattle, Merino Sheep, Jacks and Jennets P. O., Bell Air, Cooper county, Mo., R. R. station, Buncheon.

SMALL BROTHERS, Hoyt, Jackson Co., Kansas, Breeders of thoroughbred Short-horn cattle and JERSEY RED SWINE. Correspondence solicited.

50 PURE BRED SHORT-HORNS, popular families and deep milkers, for sale. Bulls ready for service. Also 40 head improved Poland Chinas, from best breeds in Ill. and Ohio. H. B. SCOTT, Sedalia, Mo.

M. WALTIRE, Carbonate, Kas., breeder of thoroughbred and high grade Short-horn cattle; Chester White hogs; Light Brahmas and Black Spanish chickens. Correspondence solicited.

Hereford Cattle.

J. S. HAWES, Mt PLEASANT STOCK FARM, Colony, Anderson Co., Kas., Importer and Breeder of HEREFORD CATTLE. 125 head of Bulls, Cows, and Heifers for sale. Write or come.

WALTER MORGAN & SON, Irving, Marshall county, Kansas, Breeders of HEREFORD CATTLE.

GUDGELL & SIMPSON, Pleasant Hill, Mo., Importers and Breeders of Hereford and Polled Angus cattle, invite correspondence and an inspection of their herds.

Swine.

J. BAKER SAPP, Columbia, Mo., breeds LARGE ENGLISH BERKSHIRE SWINE. Catalogue free.

C. O. BLANKENBAKER, OTTAWA, KAS., breeder and shipper of recorded POLAND CHINAS and Yorkshire swine. Also Plymouth Rocks. Special rates by express. Write.

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

Sheep.

E. COPELAND & SON, Douglass, Kansas, breeder of Spanish or improved American Merino Sheep; noted for size, hardiness and heavy fleece.

MRS. ANN NEWTON, Pontiac, Mich., breeder and importer of Cotswold, Lincolnshire and Shropshire Down Sheep. 100 Rams and 100 Ewes for sale. Correspondence solicited.

PAVILLON SHEEP RANCH, Pavillon, Wabunsee Co., Kas., E. T. Frowe, Prop'r, Breeder and dealer in Thoroughbred Spanish Merino Sheep.

T. C. LIPPITT, Shenandoah, Iowa, breeder and importer of high-class and registered Merino Sheep, bred for size of carcass and amount of wool. Stock Rams for sale. Satisfaction guaranteed.

Poultry.

MARK S. SALISBURY, box 931, Kansas City, Mo., offers eggs of pure-bred Plymouth Rock fowls and Pekin Ducks for \$1.00 per setting; also Hong Kong geese eggs, \$2.50 per dozen.

KANSAS STATE POULTRY YARDS, N. C. Westfield, proprietor, Brookville, Kansas, breeder of Plymouth Rocks, B. B. Red Games and Pekin Ducks.

L. DUTCHER, No. 90 Madison St., South Topeka, Kas., Breeder of Fancy Chickens, has for sale Light and Dark Brahma Cockerels, and Light Brahma Pullets; also Black Cochins Cockerels. Cheap: from \$2 to \$8. Eggs in season from above at \$2 for 13. Stock warranted pure.

KANSAS STATE POULTRY YARDS, Ohio, Iowa, N. C. and Miss Susie Westfield, prop'r, and breeders of Plymouth Rock and Black Spanish Poultry.

W. H. STEWART, Manhattan, Kas., Breeder of Pure-bred Games, Red Fyle, B. B. Reds, Cobden Blue, Red and Black Games. Send for price list.

PLYMOUTH ROCKS a specialty. I have no more Plymouth Rock fowls for sale. Eggs in season at \$2 for 13. Mrs. J. P. WALTERS, Emporia, Kas.

Mrs. M. S. HEATH,

Breeder of and Dealer in Pure-bred PLYMOUTH ROCKS. Eggs in season. For prices apply to her address—Fontana, Kansas.

Plymouth Rocks,

BRONZE TURKEYS, EMBDEN GESE, PEKIN DUCKS, SCOTCH COLLEY SHEPHERD PUPPIES, and GRADE JERSEY HEIFERS, for sale, at all time, Eggs for setting, in season.

J. M. ANDERSON, Salina, Kas.

JACOB YOST, North Topeka, Kansas, (P. O. box 818), breeder of pure blood Brown Leghorns—the champion layers. A few settings of choice eggs for sale. \$2.50 for 13.

MOUND CITY POULTRY YARDS, breeder of high-class thoroughbred Poultry. Plymouth Rocks, Light Brahmas, Buff Cochins and American Sebrights. All of the finest strains in the country. Send for circular and price list. Address: S. L. IVES, P. M., Mound City, Kas.

WAVELAND POULTRY YARDS, Waveland, Shawnee county, Kansas. W. J. McColm, breeder of Light Brahmas, Plymouth Rocks, Bronze Turkeys and Pekin Ducks. Stock for sale now. Eggs for hatching in season; also Buff Cochins eggs.

NURSERYMEN'S DIRECTORY.

RUSSIAN MULBERRIES, by mail, prepaid by us—6 to 10 inches in height, each 5c.; per dozen, 50c.; per hundred, \$4. 10 to 14 inches, each 10c.; per dozen, 75c.; per hundred, \$4. By express or freight, 15 to 24 inches, each 12c.; per dozen, \$1; per hundred, \$5; 3 to 4 ft., each 30c.; per dozen, \$3; per hundred, \$15. Mulberry Cuttings—by mail, per hundred, 50c.; per thousand, \$2.50. By express or freight, per thousand, \$1.50. For large quantities, prices given on application. Russian Apricots—Very hardy; come in bearing at 3 to 4 years old from pit; ent rely new, and different from any other Apricot. Makes a good substitute for the peach. Price each, 6c. year old, \$1; per dozen, \$8. Also, a Maltese Jack for sale. E. STANER & SON, Branch Valley Nursery, Peabody, Kansas.

THE KANSAS HOME NURSERY. The largest assortment of Standard, Tried and New Fruit and Ornamentals. Trees of real merit and true to name, including new Apples, Peaches, Oriental Hybrid, blight proof Pears, Champion and other Quinces Russian Apricots; Downing's Ever-bearing and Russian Mulberry, promising Grapes, earliest and hardy Small Fruits, Hedge Plants, etc. Price list to applicants. A. H. GRIESA, Lawrence, Kansas.

THE MIAMI NURSERIES, Louisville, Kas., Apple, Cherry, Peach, Pear and Plum trees, small fruit plants, Osage Hedge. Send for price lists. Address: CADWALLADER BROS., Louisville, Kas.

Stark Nursery. 48th year 60 acres. Catalogues free. Intending purchasers will do well to get their orders booked early; trees for spring being scarce throughout the country. STARK & CO., Louisiana, Mo.

8,000,000 One and two years old HEDGE PLANTS, for seasons of '82 and '83. WHOLESALE AND RETAIL.

Apple, Peach, Pear and Cherry trees, Grape vines, and other nursery stock. BARCOCK & STONE, North Topeka, Kas.

S. A. SAWYER, Manhattan, Kansas, Live Stock Auctioneer. Sales made anywhere in the West. Good references.

J. J. WELSH, Prop'r Commercial Hotel, St. Marys, Kansas, LIVE STOCK AUCTIONEER and VETERINARY SURGEON; with 25 years experience; will attend cases or make sales anywhere in the State. Write.

LIVE STOCK AUCTIONEER.

Satisfaction guaranteed. Can give good references. J. G. D. CAMPBELL, Junction City, Kas.

Topeka Business Cards.

WELCH & WELCH, Attorneys at law, 173 Kansas Avenue, Topeka, Kansas.

THOS. H. BAIN, Att'y at Law. L. T. COLDREN. BAIN & COLDREN, Real Estate and Loan Brokers. Money on Farms at 7 per cent. 180 Kansas Avenue, Topeka, Kas.

PRODERSON & KLAUER, 189 Kansas avenue, Topeka. Manufacturers of fine CIGARS and TOBACCO. Wholesale and retail dealers.

FERNAID BROS., (successors to J. W. Stout & Co.) Marble and Granite Monuments, Tombs, Headstones, etc., 157 and 159 Quincy street, Topeka. All work executed in the highest style of the art. Satisfaction guaranteed.

HOLMES, DRUGGIST, 247 Kas. Ave. I have the agency for Semple's Scotch Sheep Dip, which I sell at manufacturers price.

GEO. B. PALMER, Undertaker, 261 Kansas Avenue, Topeka, Kansas, dealer in all kinds of Cloth, Wood and Metallic Cases and Caskets. Office open and telegrams received at all hours of the night.

Hotel Delmonico,

DEHONEY & WEST, PROPRIETORS. Corner Fifth & Central Sts., Kansas City, Mo.

Located near the business center, only two squares west of Board of Trade building, Armour Bros. Bank of Kansas City and Bank of Missouri. House newly furnished. Union Depot street cars pass the door every five minutes. Terms \$2.00 and \$2.50 per day.



THIS N. Y. SINGER \$20 With 25 set of Attachments FREE. Warranted perfect. Light running, quiet, handsome and durable. Sent on test trial—only 25c. HARRY HOME ORGANS! 100 Reeds, 12 stops, Mechanical Sub Bass, octave coupler, 2 knee swell, with 5 steel and 11 book. ONLY \$75. Also sent on test trial—plan if desired. Etc. etc. magnificently tone, durable, and out. Circular, with testimonials, free. Ask G. PAYNE & CO., 47 Third Avenue, Chicago, Ill.

Correspondence.

Sorghum and Rice Corn.

Editor Kansas Farmer:

I will give my experience with sorghum the past season thinking that others may be benefited by my failure. I plowed the ground in April (4 acres) and drilled in with grain drill one bushel to the acre. Land first bottom. April and May were wet and cold; the seed lay on the ground a long time before it sprouted, and then came up very uneven and made a slow growth; but the sunflowers made a good stand and grew rapidly, and when the dry weather set in the sorghum gradually dried up, but the sunflowers grew right along. Next season I shall not turn over my ground for sorghum until June; harrow my ground the same day that it is plowed, and plant right after while the ground is fresh and moist, and cultivate same as corn. Sorghum needs warm weather to thrive in, and will produce more feed per acre and with less rain than anything else we can raise. It seems to be the general opinion among farmers and stock men who have given their experience with sorghum through the FARMER that stock relish it better and thrive better on it after it is matured than if it is cut before, which I believe is correct. I had some experience with rice corn, also, the past season, which met the same fate as my sorghum. Soon after I planted my sorghum, I plowed and planted seven acres to rice corn. This also proved a failure, and from the same cause. About the middle of June I re-plowed and planted again to rice corn. The ground was so dry that the seed did not sprout until July. Notwithstanding the excessive dry weather it matured and made a fair crop. Like sorghum, it does not want to be planted too early. It thrives best in warm weather and will stand more drouth than any other grain. It is relished well by stock of all kinds, and I believe deserves more attention than it has thus far received.

Allow me to say that I am much pleased with the FARMER and think it has improved much under its present management.

Larned, Pawnee Co. J. S. RUBY.

Black Spanish Fowls.

Yes, Mr. Hughes, when the Black Spanish fowls were first introduced into this country "pure white faces were unknown," but all the same those old fashioned Spanish fowls were better layers than the white-faced "high toned" Spanish fowls of to-day. Twenty years ago my father owned a flock of Black Spanish fowls, and judged by the present standard "not a blessed one of those fowls would have come anywhere near 85 points, in fact, every last one of them would have been "disqualified," but how they did lay! One of those old hens with her "face" all wrinkled up and covered with red blotches, would lay more eggs in six months than two of the "improved" white-faced Black Spanish will lay in a year. Breeders of the Black Spanish have bred for face, ear lobes and wattle, until they have "improved" the good, old-fashioned laying breed of Spanish fowls out of existence. I know of but one flock of Spanish fowls that can be called extra layers, and that is owned by a man who for several years has bred only from the best layers in his flock, regardless of face, comb, ear lobes, or any other "fancy" points. All these things are well enough if not gained at the expense of more useful qualities. Talk to a practical farmer about the number of points that a Spanish hen will save, and he will doubtless be influenced by the skill and knowledge of the breeder, but all the same he will ask: "Will she lay?"

FANNY FIELD.

Short Letters.

STAFFORD Co., Feb.—There has been but few cattle lost here so far this winter. Those that have been fed and cared for have done well; those depending on the range look very bad. The largest herd in this corner numbers 740 head. They fed from three to five tons of prairie hay per day; have no sheds nor corral; they have only lost thirteen. There are but few sheep in here; they have not been properly cared for, and there has been some lost. The rest is in poor condition. There is a herd on Peace creek

of 600 or 700 that have been well taken care of, and they look well. Wheat sown early looks well, but the late wheat looks bad. There was not more than one-fourth as much sown last fall as there was the year before on account of the dry weather. J. J. B.

STERLING, Rice Co., Feb. 13.—I have been working with sorghum for two years, both feeding and selling it. Father and I raised 100 acres last year. We sold the stalks at the factory for \$2 per ton; we gathered the seed and threshed it. We had 750 bushels of seed. We have not sold it yet. Our cattle eat the tops in preference to good prairie hay. J. T. PENCE.

HARTFORD, Feb. 12.—I will give Mr. E. W. Brown my experience with the check-row planter. In the first place, the planter tongue must be straight with the row before the rope or wire is drawn up; then give the wire the same tension each time and the rows will be straight. The team must be driven straight or the cross-rows will be crooked; this is all there is in it.

COUNTRY CRITIC.

Mitchell Co., Feb. 16.—Stock of all kinds have done well; feed is plenty; corn sells at 25 to 30 cents; hay at \$1.30 to \$2.00; oats 25; hogs are worth \$5.50 now, have been selling at \$6. Wheat seems to be hurt badly in many fields. The broom corn crop was a light one. Cattle of every description are high; a great many are talking of sheep but the money to purchase is the trouble. Our sheep are looking fine; have lost but two small lambs this winter. There is a great deal of corn in crib waiting for a better price. H. J. COLVIN.

BELLEVILLE, Feb. 16.—In answer to E. W. Brown's inquiry about checkrow corn-planting, I bought a new No. 1 Keystone planter and Hayworth check-rower last spring. Had never seen one used. I fastened checkrower on according to printed instructions, being very careful about the tension of the line drawing so that the fourth button would barely swing clear of ground if level. If uneven make allowance proportionately. Drive steady and straight at a fair walking pace. I planted 80 acres with perfect satisfaction; never saw hand planting to equal it. Give me the Hayworth checkrower. J. FULCOMER.

Gossip About Stock.

Stockmen have a meeting at Caldwell March 6th and 7th.

Gov. Glick recently received a pair of imported Berkshires.

Jeff Mails proposes keeping to the front in the breeding business.

There is to be a meeting of stockmen at Medicine Lodge, March 28 and 29.

Dr. O. F. Searl, Solomon City, Kas., has added three more Jersey heifers to his herd.

L. T. Bennett, Safford, Kansas, sold a young thoroughbred bull from his herd to Ed. Holmes for \$300.

Prof. Shelton has purchased a Berkshire boar from J. J. Mails to head the College farm herd of swine.

The members of the Comanche pool, at their recent meeting, unanimously decided to sell or drive their one year old steers to some Northern range the coming spring.

The Medicine Lodge Index says that the severe storms and the consequent drifting of cattle has demonstrated that stock will not break through barbed wire fence when properly made.

Stockmen of Western Kansas are called to meet at Dodge City on or about March 20, 1883, for the purpose of permanently organizing a Stock Association and furthering our common interests.

The Kansas State Short-horn Breeders Association request the State Librarian to purchase for the State Library a complete set of American Short-horn Herd books, Short-horn Record and Ohio Register.

The Grand Duke of Elmwood, a

thoroughbred Short-horn calf, 114 days old, weighs 474 pounds. He was the get of the Sixth Duke of Acklam, and is owned by C. M. Gifford & Son, Milford, Kansas.

C. M. Gifford & Son, Milford, Kansas, lost that noted Short-horn bull, the Sixth Duke of Acklam. The death was caused by stone in the bladder. They have quite a number of fine individuals, the get of this bull.

Wm. Booth, Leavenworth, has purchased some choice thoroughbred Yorkshire swine from T. R. Faulkner, Utica, New York; also two more Berkshire sows, among the best, from M. H. Gentry, Sedalia, Missouri.

The San Antonio Express says it is reported currently there that several large contracts for cattle have been entered into by cattle men in convention at Austin, at \$16 for yearlings and \$20 for two-years old, delivered at Dodge City, Kansas. Fifty thousand head have probably changed hands.

One of the Galbraith Brothers, who advertises a sale of fine horses in Chicago, March 15, writes the FARMER: "I have just received a telegram from my brother at Portland, Maine, in which he says that our new importations have arrived all safe and no deaths among them. Although they had a stormy voyage they have stood it well and are looking first-rate."

Master Charles W. Wright, Junction City, writes: My father, Jno. K. Wright, owns twelve Jerseys, and about two hundred head of other cattle, and eight hundred acres of land and a dairy. We milk about fifty cows in winter but more in the summer. I have six head of my own. Father sent for three or four Holsteins this spring. Frank O'Riley started for them and some fine horses.

As soon as the ground gets into plowable condition run a few furrows three feet apart on well drained land; plant seed potatoes in the furrows and cover with straw or course hay two inches deep, and throw a little earth on the straw. As soon as the plants appear cultivate between the rows, but don't disturb the mulching. This will ensure early potatoes.

John Mack writes from Grainfield, Gove county: I expect to see a good demand for well-bred cattle here this spring. Certainly men of intelligence and with sufficient capital—and there is plenty of room for such here—will find cattle-raising a safe, pleasant and profitable business in this or the adjoining counties.

Cattle and sheep, when fed on nothing but hay or fodder, become costive and feverish. In such cases, cooked feed, slops, or turnips or something of that kind is good.

Vol. V of the American Berkshire Record is on our table. It may be had by addressing Phil. M. Springer, Secretary, Springfield, Ills. Don't know the price.

A new horse disease is reported in Indian Territory. Animals fall dead without warning. We have no particulars.

Mr. Nebaugh, at the Hiawatha Institute, advised feeding artichokes to hogs in winter and until grass comes.

For wheezing in pigs, try soft and watery food, and keep them in sheltered, dry and well ventilated quarters.

Mr. Boomer, Brown county, keeps about 50 brood sows. He uses a sow but one year.

The Chicago and Montana Live Stock Company is organized with a capital of \$1,000,000.

STRENGTH

to vigorously push a business, strength to study a profession, strength to regulate a household, strength to do a day's labor without physical pain. All this represents what is wanted, in the often heard expression, "Oh! I wish I had the strength!" If you are broken down, have not energy, or feel as if life was hardly worth living, you can be relieved and restored to robust health and strength by taking BROWN'S IRON BITTERS, which is a true tonic—a medicine universally recommended for all wasting diseases.

507 N. Fremont St., Baltimore

During the war I was injured in the stomach by a piece of a shell, and have suffered from it ever since. About four years ago it brought on paralysis, which kept me in bed six months, and the best doctors in the city said I could not live. I suffered fearfully from indigestion, and for over two years could not eat solid food and for a large portion of the time was unable to retain even liquid nourishment. I tried Brown's Iron Bitters and now after taking two bottles I am able to get up and go around and am rapidly improving.

G. DECKER.

BROWN'S IRON BITTERS is a complete and sure remedy for Indigestion, Dyspepsia, Malaria, Weakness and all diseases requiring a true, reliable, non-alcoholic tonic. It enriches the blood, gives new life to the muscles and tone to the nerves.

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ILLUSTRATED AND
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SEED
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FOR 1883

Will be mailed FREE to all applicants, and to customers of last year without ordering it. It contains about 175 pages, 600 illustrations, prices, accurate descriptions and valuable directions for planting 1500 varieties of Vegetable and Flower Seeds, Plants, Fruit Trees, etc. Invaluable to all, especially to Market Gardeners. Send for it!

D. M. FERRY & CO. DETROIT MICH



BUY NORTHERN-GROWN SEEDS.

New wheat, yield 40 bushels per acre; New potatoes, 300 to 600 bus. per acre; New Early corn, 100 to 200 bus.
Russian Oats, the best in the world.
Farm seeds a specialty.
Send for plant and seed catalogue.

JOHN A. SALZER,
La Crosse, Wis.

Farmers' Newspaper.

Every Farmer should have a good Weekly Newspaper.

THE WEEKLY CAPITAL

Is the most complete Kansas weekly newspaper published. Sample copy free to every applicant. Sent one year for \$1.00. Address,

WEEKLY CAPITAL,
Topeka, Kansas.

Woman Suffrage.

Chief among the many objections that ignorant and unthinking men and women are continually raising against woman suffrage, is something that St. Paul said about the conduct of women in churches, duties of wives to their husbands, etc. When they can't think of anything else to say upon the subject they always drag in St. Paul and triumphantly ask: "What do you say to that?"

Well, if you are really anxious for my opinion you can have it. I am getting a trifle tired of St. Paul on the woman question. I never tried to do anything (except rock the cradle) in the whole course of my life, but what somebody hurled a chapter of St. Paul at my devoted head, and it is getting to be the least bit monotonous. There is a long gap between Paul's time and the nineteenth century, and his remarks about women have no more hearing on the question of our right to the ballot than they have on the tariff question. When the opponents of woman suffrage can prove by any sentence in the Bible which bears the authoritative "Thus saith the Lord," that it would be wrong for women to vote, we will bow our heads in submission; but until they do find some higher authority than St. Paul, we trust that they will see the propriety of leaving the Bible and the afore-mentioned saint out of the question.

Another thing that greatly troubles the alleged minds of the men and women who do not believe in woman suffrage is the fear that if given the ballot women can not find time to vote "without neglecting home duties." To hear them talk one would think that it would take a week for a woman to walk or ride to the polls, deposit her vote and go home again. I am inclined to think that the household machinery would not go to everlasting smash if the woman at the helm did leave home for an hour or two, or for half a day even. Merchants on their way to their stores, lawyers and other professional men on their way to their offices, mechanics and day laborers on their way to their work, stop and vote and then go about their business; and I have never heard that the aforesaid business suffered to any alarming degree. Women in general are quite as good managers as men; and the woman who could not arrange her home duties so that they would not interfere with her voting would be but a poor housekeeper. I have heard farmers say "Well, I must go to mill to-day because to-morrow will be election day;" and in the future I expect to hear farmer's wives say, "I must do some baking to-day, because to-morrow will be election day."

It is quite within the range of possibilities that sometimes it would be as much of a home duty and a Christian duty to go to the polls and vote according to one's sincere convictions as it would be to stay at home and rock the cradle or darn socks.

I have more to say on this subject; but this article is long enough. I will give you another dose when the spirit moves again.

FANNY FIELD.

Needle Work In Schools.

I should like to open a discussion in the Ladies' Department on the secular and religious education of our children. I do not know whether our district school is exceptional or similar to the generality. The children do about what they like; no inquiries made by teacher as to books, etc.; often the greater part of the day seems to be spent in "private study," a questionable occupation for young children. Ought not needle work to form one branch of work for the girls? In many countries sewing is made a complete study in the schools, and why not here? I should often be glad to get a little help in the way of needle work from my girls when I haven't time always to teach it. Of course in many families all the early education might go on at home if only circumstances were favorable; but here in Kansas with our small houses, large families, and innumerable occupations, the mother can scarcely get the time, and the little students would be being constantly called away to help some one. I tried home teaching last summer, but could not get into regular systematic ways.

Are the wild mulberries in our timber suitable for silkworm food? Please, I should like a recipe for good strong vinegar. Much obliged to the lady who recommended horse-

radish for the pickles. Does it grow well here?

Prudence's improved apple pudding used to be a great favorite with us; at one time we generally had a similar one on Sunday because it eats well cold, so could be made on Saturday. Any good cooking fruit may be substituted for the apples. I shall be glad when the voting discussion is over, it takes up so much of our page.

Cakes made as below are very much relished by our hungry troop and certainly are not impregnated with much of the indigestible grease: To every well beaten egg add a quarter of a pint of water and a cup full of brown sugar. Beat these well together with a little nutmeg and essence of lemon (if handy.) Then mix them well with enough flour to make a stiff batter and add a very little soda; bake quickly in buttered patty pans.

We find it advantageous to buy various articles of Montgomery, Ward & Co., Chicago. We have had barrels of sugar, kerosene, tea, canned fruits, clothing materials, etc., and find that besides getting a better article for the price, we actually save money after paying the freight. Does any one know of as good a firm rather nearer?

ENGLISHWOMAN.

DR. JOHN BULL'S Smith's Tonic Syrup FOR THE CURE OF FEVER and AGUE Or CHILLS and FEVER.

AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY and PERMANENT cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of BULL'S VEGETABLE FAMILY PILLS will be sufficient.

The genuine SMITH'S TONIC SYRUP must have DR. JOHN BULL'S private stamp on each bottle. DR. JOHN BULL only has the right to manufacture and sell the original JOHN J. SMITH'S TONIC SYRUP, of Louisville, Ky. Examine well the label on each bottle. If my private stamp is not on each bottle do not purchase, or you will be deceived.

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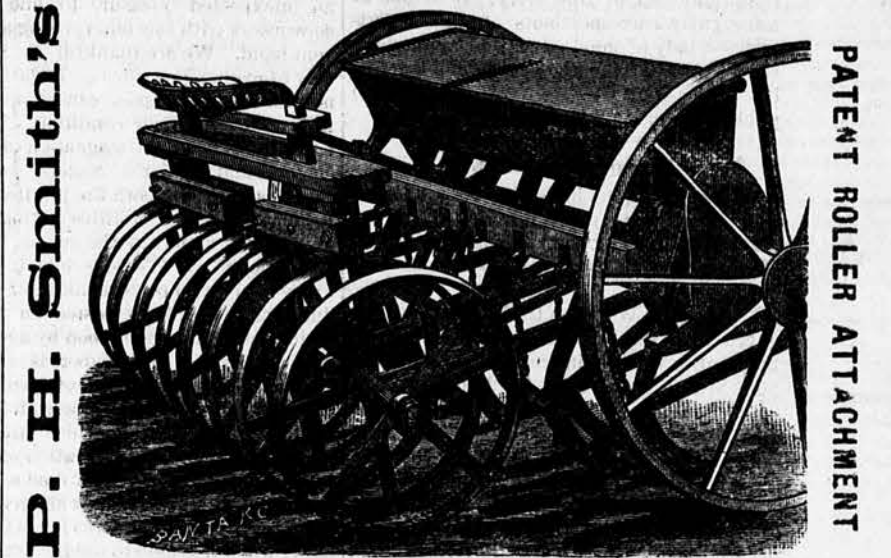
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ROSES—FINEST EVER—BLOOMING 10 for \$1; 21 for \$2. GERANIUMS, 12 for \$1. CARNATIONS, 12 for \$1. VERBENAS, 20 for \$1. TUBEROSES, 12 for \$1. CHOICE FLOWER SEEDS!

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WHEAT-GROWING MADE A CERTAINTY By the use of



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The soil is firmly pressed on the seed, causing the soil to adhere to the seed, which greatly assists germination.

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Requiring less than one half the seed usually sown, from the fact that none is wasted, either by a failure to sprout in the fall or by winter killing, by pressing the soil firmly on the seed in track of the drill hoe as it is being sown by the drill, leaving a wheel-track for the grain to grow in, which locates the wheat plant 2 to 4 inches below the general surface of the field, causing the plant to be covered by the drifting soil, it being pulverized like flour by the early spring weather, which is the most destructive weather that wheat has to pass through.

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Kansas City Stock Yards.

Covers 120 acres of land. Capacity 10,000 Cattle; 25,000 Hogs; 2,000 Sheep, and 300 Horses and Mules.

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Buyers for the extensive local packing houses and for the eastern markets are here at all times, making this the best market in the country for Beef Cattle, Feeding Cattle, and Hogs.

Trains on the following railroads run into these yards:

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NEW Vegetables

GREGORY'S SEED CATALOGUE

Specialty.

My Vegetable and Flower Seed Catalogue for 1883 will be sent FREE to all who apply. Customers of last season need not write for it. All seed sent from my establishment warranted to be both fresh and true to name, so far, that should it prove otherwise, I agree to refund the order gratis. My collection of vegetable seed is one of the most extensive to be found in any American catalogue, and a large part of it is of my own growing. As the original introducer of Early Ohio and Hubbard Potatoes, Marblehead Early Corn, the Hubbard Squash, Marblehead Cabbage, Philney's Melon, and a score of other new Vegetables, I invite the patronage of the public. In the gardens and on the farms of those who plant my seed will be found my best advertisement. **James J. H. Gregory, Marblehead, Mass.**

D. M. MAGIE COMPANY, Oxford, Butler Co., Ohio.—Originators and Breeders of the world-famous Magie or Poland China Swine. The oldest breeders and most extensive shippers of fine bred Swine in America. Have shipped our stock to seven foreign countries, and have sold an average of over 600 pigs and hogs for breeders every year, for several years. The acknowledged superior Swine of the world, because the most profitable. Nothing pays as well on a farm as our breed of swine. You can't afford to be without them. Send to head-quarters, and get the best at reasonable prices. We breed this stock only. Boars and sows from 3 months to 3 years old for sale; also sows bred, stock in pairs, trios and larger numbers not akin. Reduced rates by express.

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10 Years' Practical Use.
BARNES' WIRE CHECK ROWER.
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WIRE CHECK ROWER.

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Popular because Simple and Easy to Operate. Ten years practical use has proven the success of the Barnes' Check Rower beyond question. It has the lead with the dealers and the farmers, who have rendered an unanimous verdict that it is the best Check Rower made. The following are the advantages over any other Check Rower, and all claims established by actual use:

Use of wire in place of a rope; and that one wire will outlast two ropes.

The wire will not stretch and shrink like a rope.

The wire does not cross the machine, thus avoiding a GREAT WEAR AND STRAIN ON THE WIRE, and friction on the pulleys, and making a wire that DOES NOT cross the machine outwear several wires that do cross.

CHAMBERS, BERING, QUINLAN CO., Exclusive Manufacturers, DECATUR, ILLS.

CLOSES ON OUTSIDE OF NOSE.
Only Double Ring Invented.

Champion Hog Ringer,
Rings and Holder.

The only Ring that will effectively keep hogs from rooting. No sharp points in the nose.

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Only Single Ring ever invented that closes on Outside of the Nose.

BROWN'S Elliptical Ring
And Triple Groove Hog and Pig Ringer.

Only Single Ring that closes on the outside of the nose. No sharp points in the flesh to keep it sore.

CHAMBERS, BERING, QUINLAN CO., Exclusive Manufacturers, DECATUR, ILLS.

Ladies' Department.

Katie Darling.

Some of our correspondents inquire about the authorship of this story. It is one of the regular correspondents of this department—a lady of good mind and comprehensive powers of thought, a ready and agreeable writer—but we are not authorized to publish her name.—EDITOR.

Flowers, Cookies, etc.

Will some of the ladies be so kind as to tell me when to plant flowers? I always plant them the last of April or the first of May; but I don't have very good luck with them.

I agree with Wybel on the Woman Suffrage question. I think if we attend to our household duties we will find no time to go to the polls to vote, and I don't think one woman in a thousand would vote if she had the right.

I will send Virginia my recipe for cookies: Take $1\frac{1}{2}$ cups full of sour cream, one cup full of sugar, one teaspoonful of soda and salt; flavor to taste; bake as quick as possible without burning. Florian, I liked your letter and would like to hear from you again. Jay Eau, Kas. FARMER GIRL.

This, That And The Other.

Ladies: You have nearly all expressed your views upon the Woman Suffrage question; now let us talk about something of more interest to each of us wives and mothers. Mrs. Homespun, your views and my own correspond exactly. Aunt Polly, let us continue our plea for the good old fashioned fried cakes and delicious mince pie. Exclude either from our winter bill-of-fare and I should look back longingly to the good old times.

To those who despise fiction, Mr. Editor, what can we say? I like KATIE DARLING very much so far, and expect she will turn out a true heroine as did GERALDINE.

Severea, you are not indebted to me, but to Mrs. Macy for the hints about Christmas presents. "Honor to whom honor is due." Willow Dell, Feb. 13. MYSTIC.

No Use In It.

I cannot see the use of women voting. Cannot the men do the voting as well as if women were voting too? I do not think women could attend to public business as well as men. I think their duties as sisters, wives and mothers, call their attention at home much more than men. I think it a woman's duty to oversee her household, make home pleasant for her husband and her children. These things call her attention daily, and I do not see how a woman can vote and hold office without neglecting some of these duties which belong to wives and mothers. I think as Wybel does, that woman has in her power to improve men's morals in an easier and surer way than by voting; and I think also we might find something more interesting to discuss.

I see the Editor has given us a story. Many thanks. I think it will prove very interesting and beneficial. MEG.

Think Ruth made her pies too sweet. She used as many again eggs as she need to. One egg is enough for one pumpkin pie. To one quart of pumpkin rubbed through a coarse sieve, add three pints of good milk scalding hot, four eggs well beaten, a teaspoonful of ginger if it is good, if not, a little more, sweeten to suit the taste; I prefer cinnamon and nutmeg. We do not have soggy pie crust, or forty-rod doughnuts; I think a piece of good green apple pie and cheese is very nice. One cup of lard and one of water makes good crust; if the weather is cold heat the water; do not knead much. Raised crust is nice for fruit and chicken pie. If used for custard pumpkin is apt to make them run over.

I do not wish to vote unless for a law to compel mothers to lengthen their children's clothing. How would we feel running around with nothing on our lower limbs but our stockings.

If Mrs. M. will send a postal card to the Commissioner of Agriculture at Washington, D. C., for manual of instructions for the production of silk she can get a copy. It is sent free.

Hartford, Kas., Feb. 12.

Mrs. D. B. C.

A Homelike Letter.

MR. EDITOR:—I have been a silent but deeply interested reader of your paper for nearly a year. Being a stranger to both Kansas and the FARMER circle, I gladly took my place as a learner. It was indeed an unexpected pleasure to find ourselves co-workers with this enterprising and intelligent band. We are thankful for this happy way of exchanging ideas. Isolation of farmer's wives in the past caused much of the failure to better their condition. Discussion helps to break up the stagnation of our fixed customs and opinions. Sisters, your letters cause us to realize both the privileges we enjoy and the responsibilities resting upon us. May we not underrate the one or lightly put aside the other. We believe with Sequa, and know many who perform all their household duties and also keep posted on the issues which should be understood by every intelligent voter. A newspaper is the handiest and most useful means of furnishing this information. Our babies have all been rocked to the rustle of the peoples' educator. A neighbor mother in conversation on this subject, said she scarcely ever read a paper before she was married; now she reads as regularly as her baby prepares for his nap. This baby, when just able to toddle around, after several attempts to get his mamma to take him, found a newspaper on a chair and came holding it up and tugging at her dress pointing towards a rocker. She said she could not resist that appeal. I voted him a dear observing little cude.

Last week we attended a literary society meeting with our children. The president, a gentleman, the secretary, a lady. There seemed nothing out of place or improper as they attended to their respective duties; and as they arose one after another, lady or gentleman, and defended their side of the question, I could see nothing to condemn, but much to commend. On the way home the girls wanted mamma's opinion of the exercises. I told them I entirely approved of the ladies taking part, and although not in public life, I had often felt the lack of just such training as they were then enjoying. So they go, step by step, sharing the hard work of study and the victory together. Who can estimate the help and good influence when brothers and sisters are thus working together, following the same pursuits and mingling in the same society? Who, when he reaches his majority shall say he is any better qualified to assume the right of suffrage than she? Our children are reading a good story by Trowbridge in the Youth's Companion; of course there are bad as well as good characters in it; it would not be like life if there were not. Our sister who spoke of the bad people in fiction will turn but very few of life's pages without finding one or more of the same kind. One of our boys is just the age to appreciate "Tom" in our new story. If he learns as good lessons of thrift and enterprise as he did of temperance from GERALDINE we shall be satisfied with the story. There are about seven in our family who want to hear the paper at once; so it is read out loud, and the head of the house makes comments about like these, after hearing some of the brothers' letters: "That man's head is level," "There, that man knows what he is talking about," etc.

We mean to try a hot-bed according to instructions; tried one last year, it made a failure. Would like to see a lister; if there is a better and easier way we ought to take advantage of it. That farmer's letter about the lister not being good on side hills will spoil many trials of them. In conclusion I would say I have no higher ambition for my boys than that of intelligent, progressive Kansas farmers. M. W.

If Uncle Joe will excuse my long silence, I will say I am glad he is going to treat us to another story. How well he knows how to picture western life. Though we take more papers than I read, I look over and find the best scarcely ever missing a farm story. I think farmers should take more papers than they generally do. Children will often get interested and learn a great deal and take an interest in selling, marketing, etc., which helps a great many ways on a farm. I heard a man say once while looking at my early chickens: "Well, if my wife wants to sell eggs and chickens she will have to take them to town herself for I tell her I won't." I thought, "Oh, shame! for a man in your situation." That man was buying corn of us to haul 7 miles to feed his team through

plowing time. I doubt if he takes a farm paper. If he took the KANSAS FARMER and read it he would certainly get his crops in earlier. If a man is too proud to sell marketing why should a wife bother herself?

I think it no more disgrace to sell eggs and butter than to stand behind the counter and sell anything, from a piece of lace to a wash tub.

We butchered a few days ago. We heat water in a pan over a furnace outdoors, and have no trouble in the house every time we kill a pig. My better half says it would pay to have a furnace for that if nothing else. It don't take much wood, and leaves a nice lot of charcoals for the pigs if smothered out. I think if farmers would burn a lot of corn and give their pigs some every few days they would keep healthy and thrive better. I would say feed burned corn to the feathered flock on the farm; but I promised not to say a word about them in this letter. More when the spirit moves me. S. S. S.

Edging.

Wheat ear edging: Cast on five stitches. First row—Knit two plain, thread over, one plain, over twice and purl two together. Second row—Thread over twice, purl two together, four plain. Third row—Three plain, over, one plain, over twice, purl two together, five plain. Fourth row—Four plain, over once, one plain, over twice, purl two together. Sixth row—Over twice, purl two together, six plain. Seventh row—Six plain, thread over twice, purl two together. Eighth row—Over twice, purl five together, three plain, then commence again at the first row. This is very pretty made of linen thread.

Alice Braden: To purl a stitch: the right-hand needle is slipped in the loop in front of the left one, and the thread, after passing between the two, is brought around it. The thread is always brought forward before beginning a pearly stitch. I think that you will be able to understand it from these directions.

I have no mine, Prudence, but whenever I see or hear of any new thing I want to learn how, too. I am going to try your way of making pudding; I think it will be good.

American Girl, did you ever receive my letter? I wrote you the first of December. BRAMBLEBUSH.

Suffrage and Jelly Cake.

As to these woman suffragists I heartily agree with Mrs. Putnam. It makes me quite out of patience to see how silly some people can make themselves. But I will say that there are women competent to fill offices, lawyers, doctors, a seat in a legislature, or president of the United States, for aught I know; for when a woman makes up her mind she can accomplish anything. But for a woman to leave husband, and children too (if she has any) to the care of servants to go around the country to lecture on temperance or attend caucuses, which we will have to do and perhaps loaf on the street corners to keep up with the times; now would we not look well? What would become of our home affairs? Such a person has no respect for herself or family. As for a maid more's the pity. I sincerely think there is more good to be done in the world for a woman to stay at home, look after household affairs, and by dropping words of kindness here and there more will be accomplished and better results than otherwise. But there is one thing more: The men should not be allowed to vote unless assessed \$1,000, and then some interest will be taken in political affairs.

Now, some will say—"she believes in being governed by her husband entirely." I believe in reading all political news, understand it thoroughly, discuss it with your husband or chance visitor, and thereby save time, money and a good name. MRS. E.

Jelly cake—four eggs, one cup sugar, half cup butter, teaspoon baking powder, flour to make soft batter, bake in round tins.

Edging and Cinnamon Cake.

Dear ladies of the KANSAS FARMER: I have been reading your letters of late with great interest. Florian, I am glad to see you come again. Practical, I like to read fiction once in a while, and I do; but don't think I am any the worse for it. I don't want to read fiction all the time, but if other people do I have no objections. I am glad KATY DARLING has a place in the FARMER. I think the style is a good deal like that of

GERALDINE. I wonder if "Uncle Joe" is the same as "one who has been there," and if I don't know who he is. Practical and Beatrice, don't fail to read KATY DARLING, and then tell us how you liked it. We have heard so much of Woman Suffrage up here that we think it thread-bare. Do let us talk about something else; something about the dear home, how to make it pleasant and cosy we think would be acceptable. Here is some directions for making edging that is simple and pretty.

Cast on six stitches. First row—slip one, knit two plain, thread over, knit two together, thread over, knit one. Second row—plain. Third row—same as first, only knit three stitches instead of two, plain. Fourth row—plain. Fifth row—same as first only knit four instead of two plain. Sixth and seventh rows plain. Eighth row—bind off three and knit five plain. This makes one scallop.

Here is a cinnamon cake that we think very nice: Yolks of 3 eggs, whites of one and a half, (the whites beaten separate) 1 cup sugar, $\frac{1}{2}$ cup sweet milk, 2 cups of flour and 2 teaspoons of baking powder sifted together, frosting the whites of 1 and $\frac{1}{2}$ eggs, brown sugar to stiffen, and one tablespoonful of ground cinnamon. TANGLEWOOD.

Prompt Action in Acute Cases.

In acute cases Compound Oxygen has been found to act with great promptness. Says one of our correspondents: "I was suffering from a cold at the time I received your Treatment—with a pain in the head, sore throat, and violent cough and kept getting rapidly worse, till in a few days I was compelled to keep in my bed. In three days I was able to get up, and was entirely over it in less than ten days, which, considering that I am now an invalid at the best of times, is doing well; and I give the Oxygen credit." Our treatise on Compound Oxygen, containing large reports of cases, and full information, sent free.

DRS. STARKEY & PALEN,
1109 and 1111 Girard St., Philadelphia, Pa.

There is no profit in allowing cows to lose flesh in the winter with the hope of making it up on grass in the summer.

The wonders of modern chemistry are apparent in the beautiful Diamond Dyes. All kinds and colors of ink can be made from them.

An Ohio farmer names the Mammoth Pearl as the potato to take the place of the Peachblow, against which charges of deterioration are made.

Exactly What is Sought After.

A safe, reliable, not repulsive remedy that can be taken without interfering with business or pleasure or disorganizing the system. Such is in Simmons Liver Regulator, purely vegetable. Genuine prepared only by J. H. Zellin & Co.

Farmers trying to make a living off worn-out lands must stop selling their calves and pigs, and sell fat oxen and hogs instead, and they will soon see an improvement in the fertility of their land and in their bank account.

Gen. D. E. Cornell, of the Union Pacific railroad, states that he has used Leis' Dandelion Tonic and bears cheerful testimony to its value for persons engaged in office work, and that many of his friends have been greatly benefited by its use.

Many so-called cases of pear blight are due to other causes than blight. Quite often trees are said to be blighted from too much manure; when in fact, the heavy doses of manure water would have killed an oak or butternut as quickly as it killed the pear.

Ill health generally comes from lack of the proper life forces in the blood. To restore the blood to a healthy state use Brown's Iron Bitters.

J. M. Stahl says in the Ohio Farmer: "We consider the raising of hogs a business subject to more risks than the raising of horses, cattle or sheep; yet, rightly managed, a business that yields a good profit. But to make it profitable year after year requires great care, good judgment, and the best breeds and methods."

*Ten years ago the name of Lydia E. Pinkham was scarcely known outside of her native State. To-day it is a household word all over the continent and many who read the secular and religious journals have become familiar with the face that shines on them with a modest confidence, in which we read the truth that "Nothing ill can dwell in such a temple."

If the poultry house is cold, bank it up well on the north side with snow.

A piece of liver or other offal placed in the poultry house will be of no benefit to the hens; also a chopped turnip or mangold will be appreciated.

The Young Folks.

"Harry, you ought not to throw away nice bread like that; you may want it some day." "Well mother, should I stand any better show of getting it then if I ate it now?"

A salt mine has been discovered in Australia which is believed to be more than two thousand years old. It's a good thing it was a salt mine, or it wouldn't have kept half so long.

The average society young man is not unwilling to marry; but he must have a wife who can support him in as good style as he has been accustomed to while living on his mother.

It would be no harm if certain politicians would commit this sentence of Coleridge to memory: "The history of the world tells us that immoral means will always intercept good ends."

Two Philadelphia lawyers got into a street fight the other day. Each swore if he had a pistol he'd kill the other. At once a dozen were offered to each by spectators. When they found how anxious the populace were to get rid of them, they swore friendship and vowed to live forever, to spite the town.

"Ma," howled a boy running into the house and approaching his mother, "ma, little brother hit me with a stick." "Well, I'll whip your little brother," said the mother, abstractedly tucking together a pair of stockings she had been darning. "No, don't whip him. Don't let him have any supper. I whipped him before he hit me."

A car load is nominally 10 tons or 20,000 lbs. The following can be carried: Whiskey, 60 bbls; salt, 70 bbls; lime, 70 bbls; flour, 90 bbls; eggs, 130 to 160 bbls; flour, 200 sacks; wood, 6 cords; cattle, 18 to 20 head; hogs, 50 to 60; sheep, 80 to 100; lumber, 6,000 feet; barley, 300 bushels; wheat, 340 bushels; flax seed, 360 bushels; apples, 370 bushels; corn, 400 bushels; potatoes, 430 bushels; oats, 680 bushels; bran, 1,000 bushels; butter, 20,000 lbs.

There are some curious things about corn, and one is, where do the red ears and the speckled ears come from when you don't plant anything but white corn, and another is, why don't we find an ear with an odd number on it? You can find a four-leaf clover, but I have never found an odd row on an ear of corn yet. It is always 14 or 16 or 20 or some other even number, and it would be interesting to understand what corn knows about mathematics, and what objection nature has to odd numbers.

An old lady who was in the habit of boasting, after the occurrence of an event, that she had predicted it, was one day cleverly "sold" by her worthy spouse, who had got tired of hearing her constant "I told you so." Rushing into the house, breathless with excitement, he dropped into a chair, elevated his hands and exclaimed, "Oh, my dear, what do you think? The old cow has gone and eaten up our grindstone!" The old lady was ready, and hardly waiting to hear the last words, she screamed out at the top of her lungs, "I told you so. I told you so. You always would let it stand it out-doors."

Gibraltar.

Gibraltar, the strongest fortress in the world, is a headland jutting out of the southern termination of the Spanish peninsula, two and a half miles long, and varying in width from two to four furlongs. Nature seems to have specially fitted it for a giant fortress.

It rises abruptly from the sandy isthmus on the North, and the Mediterranean on the East to a height of 1,400 feet. On the west side the slope is more gradual, while the South is a succession of magnificent terraces, formed by the plateaus Europa and Windmill. Although it was known to the Greeks and the Romans by the appellation of Calpe, and with Ape's hill, on the opposite shore was denominated the "Pillars of Hercules," yet it was never selected as a site for a fortification until the passage of the Moors into Spain from Africa, in the eighth century. They constructed a rampart upon the hill, and gave it the name of Gebel Tarik, in honor of their leader Tarik, and from which the

term Gibraltar is a contraction. During the war of the Spanish succession in 1701, English and Dutch troops, under Sir George Rooke, assisted by Prince George, of Hesse-Darmstadt, besieged and captured the fort, ostensibly in the name of Charles, the Archduke of Austria; but Rooke caused the English flag to be raised, and took the fort in the name of Queen Anne, of England. Since that period, although it has been twice attacked, once by Spain, and once by the combined forces of France and Spain, it has remained in the possession of England.—*Ex.*

Letters From Little People.

MR. EDITOR:—I would like to ask a few questions to the correspondents of the Young Folks' Department. As New Haven is called the city of Elms, Denver the city of the prairie, and New Orleans the crescent city, I would like to inquire what are Chicago and St. Louis called also? Which is the queen city of the West? QUESTIONER.

DEAR EDITOR:—We take the KANSAS FARMER and it is a welcome paper. We have nice weather now; had a very long tedious winter. I would like to see Spring come so that I can hop along after the plow. We have a very good school; about 20 on roll, 14 attending daily. I have not missed a day yet. EARL MYERS.

Hartford, Kas., Feb. 18.

DEAR EDITOR:—My father takes the KANSAS FARMER; we like it very much. I like to read the Ladies' Department, it contains some good receipts. I go to school every day; have a good teacher. I study reading, arithmetic, geography, history, grammar, and spelling. DELLIE MYERS.

Lyon Co., Kas., Feb. 18.

MR. EDITOR:—I am eight years of age. I go to school all the time. I am in the reader and spelling and arithmetic. But I have a good dog; his name is Buncher. We have 7 pigs, 6 little ones and one old one. My name is NELLIE COOK.

MR. EDITOR:—We raised 35 acres of melons at Nickerson, Reno county, last year and will plant 20 or 30 acres this year. We ship as far West as Raton, N. M., and East to Northeast Ohio. We throw two furrows together every 15 feet, and plant on the ridge every 10 feet; then when the plants are up, plow another furrow around and hoe them; keep this up till the middle is all broke out, leave 2 plants in a hill. Our favorite kind is the Gypsy or Georgia. JAMES A. MAY.

Zenith, Kas., Feb. 23.

DEAR EDITOR:—To-day was mamma's birthday and I got her a nice present. We have a pair of canary birds; we call them Billy and Fanny. We have moved to town, but I do not like it as well as our other home. MAUDE KLINE.

Clifton, Kas., Feb. 17.

EDITOR KANSAS FARMER:—We live on a farm now, but are going to move to town before long. I will send you my essay on sugar. It was my grammar lesson at school this winter, and I got ten per cent on it; my teacher said it was the best.

Great Bend, Feb. 17. MARY HOLMES.

[The essay is too long for the FARMER. We receive so many letters, that they must be very short if they are published. Learn to be brief in letter writing.—EDITOR.]

MR. EDITOR:—I see that one of the ladies asked if some one will tell her how to make mush to fry that will not crumble. She must have her water boiling hot, and then stir in corn meal and make real stiff, and boil long enough until it gets sticky, and then take out of your kettle and let it cool until it is quite cold. EMMA PAPE.

Topeka, Feb.

DEAR EDITOR:—I live in Raymond, Kansas. We have trees, and have three ponies; one is white, one is bay and one is a dun. Before I go to school I help my sister wash the dishes, sweep the house, make the beds, etc. My two brothers, my school mate and I had a runaway with a livery team, but none of us was hurt. SPRAGUE MASEMORE.

Raymond, Kas., Feb. 23.

MR. EDITOR:—If dew is formed according to C. A. S.'s answer to question No. 8, why does not dew fall when the weather is windy

or cloudy? I would also like to ask G. C. E. why she thinks that women should vote? Feb. 22. ENQUIRER.

DEAR MR. EDITOR:—I would like to ask Little Gertie where she got authority for saying London has over 4,000,000 population. I am herding for father, and we are troubled with coyotes. Can you tell me how to trap them? FRANK.

Russell Co., Feb. 20.

Enigmas, Charades, Questions, Etc.

ENIGMA, No. 7.—J. F. Nixon.

I am composed of 28 letters.
My 18, 26, 11, is a domestic animal.
My 12, 15, 6, is a domestic bird.
My 17, 10, 20, is found in hardware stores.
My 21, 14, 9, 23, is precious.
My 24, 19, 6, 28, is something, the possession of which is supposed to denote courage.
My 1, 22, 3, is an adjective, used very often.
My 2, 5, 9, 4, is a fibrous plant.
My 8, 7, 16, 5, is a name for father.
My 13, 18, 27, 26, 25, is to cast.
My whole is a motto, often debated, and sometimes seen in copy books.

ENIGMA No. 8.—J. A. Coy.

I am composed of 21 letters in 4 words whose example each reader should follow.
My 15, 9, 17, is a useful animal.
My 11, 17, 2, 11, 4, is used on all railroads.
My 1, 4, 2, 19, 21, is a large fish.
My 4, 20, 16, 7, 21, is used on all doors.
My 3, 14, 21, 5, 7, 4, is a beautiful vehicle.
My 6, 17, 8, 21, 3, is used in music.
My 11, 2, 7, 1, 2, 10, is a farmers' most useful vehicle.
My 11, 17, 13, 6, 18, is what we should all learn.

QUESTIONS.

Question No. 20, by J. S. N.—I looked at the clock. The hour hand was between 1 and 2, the minute hand between 2 and 3; within an hour I looked again, the hands had just exchanged places. What time was it when I first looked at the clock.

Question No. 21, by several.—I have \$100 for to buy stock with and want to buy 100 head; how many will it take if I pay \$3 for pigs, 50 cents for sheep and \$10 for cows?

Question No. 22, by Geo. B. Stahl.—There flew a flock of crows; one asked, you hundred crows, where are you going? One of the crows answered, we are no hundred, if we were twice as many, then $\frac{1}{2}$ then $\frac{1}{4}$ and then yet one, then we would be one hundred. How many were in that flock?

Answers to Questions.

Question No. 13.—Ans. 15,000 grains; 3 bushels and nearly 18 pints.

Question No. 14.—Ans. The first Sunday coming on or after the day of the first full moon after the 21st day of March.

Question 15.—Ans. 40.

* Enigma No. 3.—Ans. American Cultivator.

SOME RULES.—Our young friends will please remember and apply the following rules when writing to us.

1. Write on one side only of your paper.
2. Give your proper name and postoffice address. If you do not desire to have the name published, tell us that, and you may sign as you wish. But give the name.
3. When you send a question, enigma, charade, etc., give the answer, also.
4. When giving an answer to anything previously published, refer to it by its title and number; as, Question No. 9, Enigma No. 2, Charade No. 1, etc.

Humbugged Again.

I saw so much said about the merits of Hop Bitters, and my wife who was always doctoring and never well, teased me so urgently to get her some, I concluded to be humbugged again; and I am glad I did, for in less than two months' use of the Bitters, my wife was cured, and she has remained so for eighteen months since. I like such humbugging.—H. T., et. Paul—Pioneer Press.

Early hatched pullets should be laying now and if they are not, the cause why is probably for lack of warmth, food, drink and care.

As dry earth in which the fowls can dust themselves is often difficult to obtain in winter, a good substitute can be had by using coal ashes, which should be sifted into a box and placed in the hen house.

Hop Bitters are the Purest and Best Bitters Ever Made.

They are compounded from Hops, Malt, Buchu, Mandrake and Dandelion,—the oldest, best, and most valuable medicines in the world and contain all the best and most curative properties of all other remedies, being the greatest Blood Purifier, Liver Regulator, and Life and Health Restoring Agent on earth. No disease or ill health can possibly long exist where these Bitters are used, so varied and perfect are their operations. They give new life and vigor to the aged and infirm. To all whose employments cause irregularity of the bowels or urinary organs, or who require an Appetizer, Tonic and mild Stimulant, Hop Bitters are invaluable, being highly curative, tonic and stimulating, without intoxicating.

No matter what your feelings or symptoms are, what the disease or ailment is, use Hop Bitters. Don't wait until you are sick, but if you only feel bad or miserable, use Hop Bitters at once. It may save your life. Hundreds have been saved by so doing. \$500 will be paid for a case they will not cure or help.

Do not suffer or let your friends suffer, but use and urge them to use Hop Bitters.

Remember, Hop Bitters is no vile, drugged, drunken nostrum, but the Purest and Best Medicine ever made; the "Invalid's Friend and Hope," and no person or family should be without them. Try the Bitters to-day.

England has nearly one sheep for every acre of territory, while the United States has one for every thirty four acres.

Bright's Disease.

A Sure Cure. Until recently it was thought Bright's Disease of the kidneys was incurable. The statement is disproved by the wonderful success of Hunt's Remedy, the great kidney and liver medicine, which cures Bright's Disease perfectly. All diseases of the kidneys, bladder, liver, and urinary organs, Hunt's Remedy cures like magic.

Salt is used to destroy the onion maggot with partial success. About the first of July sow two bushels to the acre; the salt also hastens the maturity of the crop.

Sick Headache

is a malady affecting many people in this climate. In a large majority of cases it is caused by malarial poisoning and consequent torpidity of the liver. All of these cases can be permanently cured by the use of Lels' Dandelion Tonic in small doses.

Lansing, Mich., has a Refrigerator Company which stores up summer-made butter at low prices, to be sold in the winter at advanced figures. It has now on hand over fifty tons, all of which is said to be of excellent quality.

Do not put lime in the manure heap, for it destroys the salts of ammonia, and by compelling it to take the gaseous form drives it off. Lime will rot manure very quickly and do its work well, but it will be at the expense of a loss of nitrogen, which is an ingredient of ammonia.

Ask your Druggist for a free Trial Bottle Dr. King's New Discovery for Consumption.

A fruit-grower says in the Ohio Farmer: "The beginner must first try on a comparatively small scale. This will apply particularly to berries. Of tree fruits it takes a longer time to ascertain the value of any particular kind. I would therefore advise a beginner to make his choice principally from such as are known to do well in his neighborhood, and not plant too many varieties."

RED CEDARS.

Now being taken from the sunny slopes of Arkansas, by experienced men and warranted equal to the best in the market. 8 to 16 inches, on car at Eureka Springs, \$10 per 1,000; from here at \$13 per 1,000. Write for our circular. W. CUTLER & SONS, Junction City, Kas.

WESTERN STOCK FARM For Sale. Situated in the heart of the great Western stock region. Valuable improvements; 1,000 acres under fence. Thoroughbred Stock, Stables, Sheds, Corrals, and every convenience for fine stock growing. Handsome Brick Residence. For full particulars apply to GEO. P. BEMIS, OMAHA, NEB.



FOREST TREES

Catalpa Speciosa,
White Ash, European
Larch, Pines, Spruces,
Arbor Vitae, etc., etc.
Catalpa Speciosa Seed
Forest and Evergreen
Seeds.
E. DOUGLAS & SON,
Waukegan, Ill.

THE COOLEY CREAMER

Saves in labor its entire cost every season. It will produce enough more money from the milk to

Pay for Itself Every 90 Days

over and above any other method you can employ. SEND FOR CIRCULAR to

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THE KANSAS FARMER,

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H. C. DEMOTTE, President.
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TERMS: CASH IN ADVANCE.

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REMEMBER:—The club must be FULL and the CASH must accompany the order. If you wish the FREE COPY, so state in your order.

KANSAS FARMER COMPANY.

Prof. Shelton advises pushing pigs as fast as possible until they are four to five months old.

Will "Russell County Farmer" please forward his name and postoffice to this office? We have lost them.

Notices of Farmer's Institutes to be held at Mankato and Edgerton came too late for publication last week.

We are advertising a "Soil Pulverizer" for Kingman, Andrews & Co., Kansas City. We think it will pay our readers to investigate it.

A. H. Griesa, whose advertisement appears in the FARMER, has a large variety of nursery stock, all true to name, and he offers it at low figures.

Prof. C. V. Riley, Entomologist, Agricultural Department, Washington, has issued a circular letter asking for information about the canker worm.

We have a good letter on Temperance, but we do not care to publish matter on that subject except as it plays parts in argument in favor of enforcing the law against rum-sellers.

Mr. Downs, of Topeka, in a letter to the Capital, complains that Chicago grain handlers grade Kansas wheat 5 cents below the Kansas City standard. Then he would do better to sell at Kansas City.

It will be seen from the advertisement elsewhere in this issue, that any one can have a specimen number of the American Agriculturist, by simply sending a 3-cent stamp for postage to the publishers.

In Kansas all kinds of seed for growing ought to be covered unless it is sown in snow or evaporating water, so that as the snow melts or water evaporates the seed may sprout and catch before the ground dries. Better trust to covering.

Prof. Ward, in his report of farm instruction at the Agricultural College makes a good suggestion about the students working manually on the ground. A boy cannot learn much about farming if he is indoors all the time. That is not where farming is done.

A. W. Rollins is of opinion that he was incorrectly reported in last week's FARMER wherein he was credited with stating that he had brought a shorthorn cow to Kansas that produced sixteen gallons of milk daily. Let the record be amended accordingly.

On the quantity of wheat seed required to sow an acre of ground, P. H. Smith, the Roller Attachment man, says: "One-fourth of a bushel of wheat being 80,000 grains, and that properly distributed over one acre and properly protected and all permitted to develop even moderately well, and at the rate of ten stalks to each stool and thirty grains to each head would produce 72,000,000 grains or a little over seventy-one bushels."

Setting Out Fruit Trees.

It will soon be time for tree planting in Kansas, and although two or three competent correspondents of the FARMER have in the last two or three weeks given good counsel on the subject, another word may not be out of place.

The ground ought to be prepared by very deep plowing. That is better done in the fall. Open large furrows by throwing the earth out on both sides with the plow where the rows are to be, then cross mark to guide in setting.

Trees ought to be set six to ten inches deep according to age and size. Remove with sharp knife all broken or damaged roots. Spread out the roots evenly, and cover with loose earth; shake the stem so as to settle it well among the roots, and if the earth is dry, then pour on some water and cover with the plow. Press the earth about the trees by tramping it. If the earth is moist no water need be used.

Apple trees ought to be two rods apart when fully matured; but they may be set one rod apart, and when they become too large for that space, they may be thinned out. They will fruit six years before crowding.

If the tops are large cut back; but before doing that study the makeup of the tree and also what shape of head you want. Don't cut the main stem off below the best branches. Let the trunk lean a little to the southwest, for our strongest winds come from that direction.

The ground ought to be well drained. Water ought never to stand on an orchard. If the ground is flat, furrows ought to be drawn from the middle of the rows to some lower place, and the drains should be kept open.

All young orchards need cultivation as much as corn. Potatoes, or any small root crop, or small fruits may be raised between the rows of trees the first three or four years, and then, after a heavy manuring, sow to clover and blue grass.

Rice Corn.

Mr. Joseph Gantt, Great Bend, Barton county, who has been growing rice corn several years, writes to the FARMER, giving his experience. This is what he says in conclusion of his letter:

In 1882 (last year, very dry) I prepared fourteen acres for millet, and in the month of June, perhaps about the 15th, I drilled in twelve acres to millet, using a Sucker state drill. I concluded to put two acres in rice corn. I tacked on pieces of leather over every other hole in the feed and set the feed close so as to feed but one grain at a time, and let it run. Put in the two acres in this style partly as an experiment, and because I had but little time to spare for the work. It came up and grew. The hot weather of September that damaged the corn tried it severely, so that some of my neighbors said it couldn't make a crop, but it came along, slowly headed out and filled, and when I cut and stacked my millet (half crop) it stood five or six feet in height, green and well filled. I expect to thresh it in a few days. Think I will have seventy-five or eighty bushels from the two acres. It is good feed for poultry, hogs, horses, and I think good to grind for feed for milk cows, and perhaps better to feed horses in bad weather than corn. It will withstand the hot, dry weather better than oats, barley or corn. It is a warm weather plant, and I would not plant until after weed seeds have started, and then drill on clean, fresh sod. I did not work mine. When ready I gathered by hand, but in larger seeding think I could cut with header. Stack and thresh with machine. It will do well on sod if there is moisture enough to start it.

About Grass Seeding.

There is one peculiarity about Kansas soil with reference to the planting of all small seeds that every experienced farmer has observed. Because of the dryness, rarity and motion of the atmosphere, the surface of the earth soon becomes dry. This dryness extends downwards to a greater or less depth as the air is more or less moist, and is produced slower or faster as the wind happens to move, and in accord with the temperature surrounding. In cold weather this surface drying is not so rapid, and does not go down so deep as in warm weather, and the stronger the wind is, in either case, the more rapid does the surface dry out.

This teaches us that, generally, in Kansas, all seeds must be covered, if we wish an early sprouting. Small seed may be sown on snow, or in water that soon evaporates or sinks. But this is not, and ought not, be often done. Clover seed may be sown on snow when it is to grow among plants already growing, as wheat. But the better plan in this state is not to sow grass seed among any growing stalks.

Surface drying is affected, also, by the condition of the soil as to its state of pulverization and the depth of loose earth. The finer the soil, and the deeper it extends, the shallower and slower is the drying. This teaches the necessity of having a deep, well pulverized bed of earth to receive the seed.

Another thing which affects this drying of the surface is fertility. A rich, fertile soil remains moist longer than a poor, barren one, and this shows the importance of manuring.

Then we have these rules to guide us in grass seeding. Let the soil be rich, deep and well pulverized, then cover the seed. Our experience and observation teach that grass seed should be sown as early in the spring as the ground is in good condition for working. Sow as you please; cover with light harrow, and roll. We have sown grass seed with wheat and oats, but never secured a stand that way in Kansas. When the weeds begin to grow vigorously, mow them off low, and the mulch will be good for the young grass. Don't let a weed go to seed, and don't begin to make hay of the grass until you have secured a good stand.

As to quantity of seed per acre, that varies according to the nature and condition of soil, and the temperature of the atmosphere. On rough, or poor, or dry soil, more seed is needed. An average is, clover, 9 to 10 pounds to the acre; timothy, 12 to 15 pounds; alfalfa, 20 to 25 pounds; orchard grass, 18 to 20 pounds; blue grass, 25 to 30 pounds; red top, 20 to 25 pounds; Johnson grass, about one bushel to the acre.

For a lawn, Kentucky blue grass and white clover mixed are the best. Add two or three pounds of white clover seed to the quantity above given of blue grass seed.

For pasturing, clover and orchard grass are best, but they ought not to be mixed. Timothy makes the best hay for horses, and clover for cows. Orchard grass ought not to be mixed with any other kind. Clover, blue grass and timothy may be mixed, all three together, or any two of them. But in sowing the seed mixed, do not reduce the quantity proportionately. Use good judgment about it.

As to what is the best grass we cannot safely state, because it depends so much on the soil and locality. Experiments on the College farm and on many private farms are much in favor of orchard grass and alfalfa. Captain John Ritchie, of McPherson county, has had some very satisfactory experience with Johnson grass. A. Hollingsworth, Winfield, is said to have made successful ex-

periments with this grass. Captain Ritchie promised to give our readers a statement soon.

Timothy and clover do better on rich and low land, while alfalfa and orchard grass are not so much affected by altitude, though clover, if well set, does well wherever alfalfa does, for they are both clovers.

Personally we have succeeded best without mixing grass seed; but it seems to be the general opinion that clover and timothy and blue grass may be profitably mixed.

Maximum Rates.

That means highest rates; minimum means lowest. Some persons urge that the enactment of maximum rates by the legislature is a dangerous proceeding. This position is urged seriously, and yet there is not a state in our Union to-day that has not just that kind of a law. Every railroad in the United States, chartered under state laws, is, and has been all along, operated under the law of maximum rates. This paper, a few weeks ago, published Kansas maximum rates. Kansas roads have been operated under that law from the beginning, and are so operated now. Even the Kelly bill makes passenger rates, and fixes as maximum freight rates those which the roads may have established when the law takes effect, and prohibits any advance on them except on 60 days' notice.

It is a very simple thing—this maximum rate, business. There is nothing insurmountable in the way of ascertaining what are reasonable maximum rates, because every road in the country has rates, and they may be used as reliable figures in making up a maximum estimate. What railroads have done, is fair evidence of what they can do. Transportation will become cheaper instead of dearer in future. Take railroad figures that have afforded satisfactory remuneration; fix them as highest rates; then allow the companies to play as they please below that standard, just as they are doing now; but require all changes to have uniform effect upon all patrons of the road.

We hope the House will insist upon this principle in its treatment of the vexed question now before the legislature. The purely commissioner theory, rests, for its value, wholly upon the ability, courage and integrity of the men composing the board; and even men of the highest standard, under the Kelly bill, have no power to do anything that the people want done. It is to the interest of railway companies to keep their road bed, their depots, their bridges and cars in good condition. They do not need commissioners to point out these things to them. But that is all the affirmative power the commissioners would have under that bill.

We believe, and have plainly said, that the House bill fixes freight rates too low for practice, and would be pleased to learn that proper changes are made by the conference committee and approved by the House; but whether this is done or not, let the members stand on the principle that the people demand, and they may safely leave the responsibility rest with the Senators who are now serving their last term.

We have a letter from a correspondent complaining that he has not been fairly treated by the Southern Kansas Seed House. He ordered seed corn and he says they sent him a white corn "mixed with yellow grains and small end grains. The lot together did not show as well for large, plump kernels, by fifty per cent. as is found on any farm in Reno county." We supposed the firm was reliable, but this is not a good showing. We will be pleased to learn of any similar cases against them.

The Legislature.

This body will probably remain in session most of this week.

About twenty bills had passed both houses when our last report was had—yesterday, and not one of them was of general utility. All of them relate to some local matter. Appropriation bills have been discussed the past few days; and all the really important matters of the session are at this writing undisposed of. No law yet passed on transportation; no amendment of the liquor law; no congressional apportionment bill, though all of these matters have been discussed, and on railroads and apportionment each house has passed its own bill.

The committee of conference on the railroad bills agreed after several days' deliberation—agreed by a majority, all the Senate members, Messrs. Kelley, Sluss and Glasse, and three of the House members, Crichton, Gillett and Scott. Messrs. Knappenberger and Hoffman, of the House members, did not agree to the report which a majority signed. The report recommended the Senate (Kelley) bill substantially. The report was submitted to the Senate and adopted by a large majority. Senators voting against it were Anderson, Collins, Crane, Hogg, Hutchinson, Johnitz, Jones, Riddle and Ware. The action of the Senate was communicated to the House Monday and rejected by that body by a vote of 47 to 72. The absentees were Barnett, Carter, Crawford, Isely, James Stearns. Another conference committee was ordered.

Among the prominent characteristics of the present Legislature is a tendency to reckless extravagance. The first step in this direction was the appropriation of ten dollars to every member for postage. Private and local interests have precedence. Last Monday the Senate agreed to pass a bill appropriating money as a donation to the Samaritan Mission at Kansas City, Kansas, and on the same day the House recommended for passage three different bills, each one appropriating \$200 a month to a private institution—Home for Friendless Women, at Leavenworth; St. Vincent's Orphan Asylum, at same place, and the Kansas Orphan Asylum. All these institutions are worthy of public sympathy and support; but they are purely private, and have no claims upon the funds raised by public taxation. They are not responsible to the State; no State or public officer disburses or applies the funds, a large part of which may be, and we believe is, used for private comfort of persons employed about the places. In the session of 1875, the writer of this plea with his fellow-Senators and with members of the House to donate money to the thousands of poor people in Western Kansas who were on the verge of starvation; but not a dollar was voted for that purpose. Similar appeals have been made since without effect, though the present body seriously considered a proposition to give money to sufferers along the Ohio river in one of the wealthiest portions of the country. The committee of Ways and Means of the House, through its chairman, was asked to make a reasonable appropriation for experiments on the College farm in the interest of the farmers, and we find in the bill an item for the farm department, including fencing and experimenting in stock, \$500 a year. The farmers of Kansas may have \$500 of their taxes expended for their benefit, while two private places in one town may have nearly \$5,000, and others at other points like amounts. How members can satisfactorily explain these things to their constituents, we do not know. That is their business. We believe, however, that most of them will

be confronted with troublesome questions on some of these matters by an indignant constituency. The entire appropriation for the State Agricultural College, for two years is only \$27,650, or \$13,825 for one year, and the three private bills recommended by the House last Monday aggregates \$7,200, and they are not half of that class of leeching. The Senate passed appropriation bills, one day last week, amounting to \$261,000 dollars, and the only items upon which there seemed to be any hesitancy were \$2,500 for a green house for the State Agricultural College and \$200 to pay expressage of fruits by the State Horticultural Society.

There are now more than three hundred bills to be disposed of, and this is February 28.

At the last meeting of the Douglas county Horticultural society, it was generally believed that peach buds are destroyed for this year. Pears and apricots are not injured. Strawberry plants are in good condition—Gregg and Hopkins most prominent. James Vick strawberry was recommended. Speaking of apples, Mr. Deming said that our standard varieties of apples, such as the Winesap, Ben Davis, etc., are not good enough to meet the demands of the Western market. He informed the society that he intended to change the character of his orchard, by top grafting the Yellow Bellflower, Baldwin, Newtown Pippin, and some other choice varieties, believing that they will be more fruitful worked in this way. A. C. Griesa reported the grape prospect good. Last year the grape crop was almost a failure. He anticipated a good crop the present season. Mrs. Rodman informed the society that a large number of house plants throughout the city and county, had been lost by the severe cold winter.

Johnson Grass.

Captain John Ritchie, of McPherson county, grew Johnson Grass last year and was much pleased with it. It sprouted and grew vigorously. He cut some of it twice, and another crop grew rapidly. The hot weather did not affect it, but frost did. The roots grow deep down and are large and strong.

The Captain regards it with much favor, and promised us to report in the spring and again in the fall. He thinks it will make good pasture and hay, and advises experiments with it.

The Missouri Valley Horticultural Society has made a good program: March, Fruits and orchards; April, Top grafting; May, Watering plants; June, Manuring trees and orchards; July, Potting strawberries; August, Budding; September, Season for planting small fruits; October, Grape grafting.

The New York Silk Exchange, 37 Bond street, offers to distribute 100 to 200 silk worm eggs to any person applying soon provided he is in the silk raising business, or intends going into it, and provided he will report his success. Send 3-cent stamp for postage. This, we believe, is a reliable house.

A Farmers' Institute will be held at Edgerton, Johnson county, the 1st and 2d, and at Columbus, Cherokee county, the 8th and 9th days of March. Some of the State Agricultural College Professors will attend both of them.

The Leis Manufacturing company are so confident of the purity of their German Baking Powder that they offer a reward of \$500 to any one who can find any impure or hurtful ingredient in it.

Mr. M. C. Etherton, of Poplar Ridge, Jackson county, Illinois, paid this office a brief visit yesterday. He says the waters he had to cross were away up yonder.

Inquiries Answered.

The number of families in Kansas is about 200,000.

This office does no printing except that of the FARMER.

L. Dutcher, 90 Madison St., Topeka, advertises pure dark Brahma eggs, and we believe him to be reliable.

J. K., of Winfield, will favor Wm. Atkinson, Olathe, Kas., by giving him the full name of the said J. K.

If J. Fulcomer will correspond with Trumbull, Reynolds & Allen, Kansas City, he will obtain the information he seeks.

The State Board of Agriculture is made up of persons elected by officers of the several agricultural societies in the State.

The Kansas Home Cook Book is recommended by experienced housekeepers. It is published by Crew & Bro., Leavenworth, Kas.

A. H. Griesa, Lawrence, Kas., is a competent person to talk to about strawberry plants. Write to him and tell him what you want.

A subordinate Grange may adopt a constitution of its own making, provided only that it does not conflict with the constitution of the State Grange.

D. C. H. will do well to remove every branch that has the seed nests on, and when young worms appear on the vines, watch and destroy them. There is no specific remedy that we know of. Watch and pray, and kill.

Horns are removed from calves by cutting the skin in a cross, over the young horn, pushing the skin aside, lifting or cutting the little horn out, and then sewing the skin over the spot. It is successful, but it is cruel.

The time of the earliest white settlement in Kansas is not yet positively settled. Trappers were on Kansas rivers a hundred years ago, and Zebulon Pike crossed our territory in 1806. Descendants of Daniel Boone settled on Stone House Creek on the North side of Kansas river between Lecompton and Lawrence. This is believed to have been the first settlement, but the time is not fixed. It was, probably about 80 years ago. Fort Leavenworth was established in 1827, Shawnee Mission in 1831, and Osage Mission in 1847.

To get rid of lice on canary birds, the first good thing to do is, remove the birds and clean the cage, or get a new one and put them in that. The cage may be cleaned by a thorough washing and scrubbing with sulphur water. Burn the old perches and get new ones. Dry the cage and give it a good fumigation with sulphur. Cover the cage with a closely woven cloth and burn sulphur in the bottom. Take the birds in your hands and wash them clean; when dry, rub on their heads and under their wings a mixture of sulphur and unsalted grease; put it on the skin among the roots of the feathers. Do this once a day as long as necessary. Put a little sulphur in the water that the birds bathe in and drink. The cage ought to be fumigated once a day until the work is completed.

Why should the cost of building a railroad be considered in estimating the value of services in transporting freight, if we do not apply the same rule to the poor man's wagon?

Mr. Marlatt, at the Manhattan Farmers' Institute, said it is no more difficult to obtain a stand of tame grass than it is to get a stand of oats. He raises clover and orchard grass successfully.

Kansas breeders report better sales this year than ever before.

What About Whisky.

It begins to appear as if the legislature intends to let the prohibition law run itself in the interest of free whisky. The members have abundant opportunities to witness the methods adopted by the city government of Topeka in enforcing the law. Gin mills are running openly here. Their signs are as prominent as those of merchants. A few weeks before the last election, they were closed up by a simple order of the Mayor. That order has not been countermanded; but since the election, all the old sinks are open, and now, every member of the legislature sees for himself that in the capital of the state, there are more dramshops than churches and school houses combined.

This ought not to be so. The law ought to be enforced or else it ought to be repealed and let the people of Kansas brand themselves as hypocrites and cowards. Verily the power of whisky and the love of office are important factors in public affairs.

Hence we ask—What about whisky?

THE MARKETS.

By Telegraph, February 26, 1888.

Chicago.

The Drovers' Journal reports: HOGS Brisk and strong and 5a10c higher; mixed packing, 6 25a5 90; heavy, 7 50a7 60; light, 6 25a7 07; skips, 4 40a5 60.

CATTLE Active and 10c higher, demand brisk and all sold; exports, 5 75a6 00; good to choice shipping, 5 15a5 65; common to fair, 4 40a5 10; good demand for cattle suitable for dressed beef by operators made butchers more active and strong at 2 45a4 65; stockers and feeders slow and weak at 3 15a4 75.

SHEEP Dull and overstocked; trade very slow; prices 15a20c lower; common to fair, 8a4; medium to good, 4 30a4 50; choice, 5 00a5 50; prime to fancy, 5 75a6 20.

Wheat—Mch opened at \$1 07½; noon \$1 07; April opened at \$1 18½; noon \$1 08½. Corn—Mch opened at 55½c; noon 56½c. April opened at 56½c; noon 56½c. Pork—Mch. opened at \$18 05; noon 17 97½.

St. Louis.

St. Louis, Feb. 26. Noon. Wheat Red winter Mch 1 10, Corn Mch. 51½. April 57½.

The Western Live Stock Journal reports: HOGS Active, strong and higher; light, 6 70a 7 10; packing, 6 90a7 35; heavy, 7 20a7 40.

Kansas City.

The Live Stock Indicator Reports: CATTLE Market firmer and fairly active; native steers averaging 1,200 to 1,500 pounds sold at 4 85a5 85; stockers and feeders 4 60a4 65; cows, 2 80a3 75.

HOGS Market firmer and 5c higher; good to choice packers 7 00a7 25; medium to mixed packing, 6 85a7 00; light 6 65a6 80.

SHEEP Market quiet and steady at 4a4 40 for good to choice native muttons.

Price Current reports: WHEAT No. 3 cash, 86c bid, 88½c asked; No. 2 cash, sales at 93½a94c.

CORN Market weaker; No. 2 mixed cash, sales at 43½c.

OATS No. 2 cash, 33½c bid, 33½c asked.

BUTTER Market unchanged.

EGGS Market unchanged at 33c per dozen.

ONIONS Some life noticeable, and prices steady. We quote at 80a1 00 per bus from the store.

POTATOES We note some city trade to-day. We quote choice Northern in car load lots: Early Rose, 70a75c per bus. Peach Blows and Burbank, 75c per bushel. Peerless and White Methanook, 70c. Early Ohio, 90c sacked, 5c per bus higher. Home grown in wagon lots, 65a85c.

PARSNIPS 50c per bus.

SWEET POTATOES Red, 50a60c per bus from growers. Yellow, 70a80c per bus.

TURNIPS Quoted at 30a40c per bus, from growers.

CASTOR BEANS Dealers and crushers buying at 1 18a1 20 per bus.

FLAXSEED Dealers and crushers buying at 1 13a1 14 per bu.

BROOM CORN Common, 2a3½c per lb. Missouri evergreen, 2½a3c, Hurl, 2a3½c.

SORGHUM We quote at 40c per gallon for dark and 42½a43c for light.

WOOL We quote: Missouri and Kansas tub washed, 30a32c; unwashed, choice medium, 20a21c; fair do at 17a19c; coarse, 16a18c; New Mexico, 14a18c.

SEEDS These prices are on country orders.

Clover, red, prime, per bus, 8 00; Timothy, 2 10; Kentucky blue grass, clean, 1 10; Kentucky blue grass, extra clean, 1 20; Orchard grass, 1 30; Red top or herd grass, 95; Hungarian, 70a1 00; Flax seed, pure 1 50; Osage orange, old 2 50; Osage orange, new, 4 50.

Short-Horn Registry.

Following are the revised rules of entry adopted by the Board of Directors of the American Short-horn Association for the government of entries in the Consolidated Herd Books:

1st. Pedigrees shall give the name, color, sex, date of birth, name and address of breeder and owner, and full pedigree, with, when practicable, volume and page of record of the last dam recorded.

2d. The animal must trace, on the side of its sire and dam, to imported English Short-horns, or to pedigrees, not false or spurious, already of record in herd books published heretofore in the United States.

3d. Whenever errors not intended as frauds are discovered in pedigrees of animals which have been bred and recorded as Short-horns, the descendants of such animals shall be entitled to record in future, provided females have five crosses of recorded or recordable bulls, and males six of such crosses, and that males with such pedigrees which have been recorded previous to the discovery of the error shall be retained on record, and wherever the name and number of the bulls so erroneously recorded appears in any pedigree, the same shall be indicated by an asterisk.

4th. On and after Jan. 1, 1884, imported animals must be of record themselves or have sires and dams recorded in the English Herd Book.

5th. On and after Jan. 1, 1885, no animal except imported animals shall be eligible whose sires and dams are not already on record.

6th. Pedigrees of bulls shall be printed in full, unless there be more than one of the same pedigree in the same volume, to which reference may be made, and the pedigree abbreviated. Bulls shall be recorded in alphabetical order, and shall not be re-entered except to correct material error in first entry, and the corrected entry shall have a new number, to which reference shall always thereafter be made.

7th. Females shall be entered under their owner's names, in alphabetical order, and no charge shall be made for produce under dams, which shall be furnished as far as known.

8th. Pedigrees of females may be abbreviated by reference to complete pedigrees under the same owners' names and in the same volume, and any cow having produce since the last entry may be re-entered with her produce.

9th. All bulls appearing in the lineage of animals sent for record must be recorded in full, with proper numbers in the American Herd Book, and the pedigrees of all reference bulls not so recorded must be sent in full with the numbers by which they have been recorded in any other book.

10th. There shall be separate and alphabetical indices of females and of bulls entered as produce, and of breeders and owners in each volume.

11th. Should any person or persons intentionally or knowingly impose a fraudulent pedigree on the American Short-horn Herd Book, space shall be devoted in the succeeding volume to his or their exposure, and he or they will never be allowed to enter another animal in the American Short-horn Herd Book after they are convicted by the board of directory.

Resolved. That in consideration of the extraordinary expenses incurred in the purchase of the several herd books, the charges for the present for recording shall be as follows: For each animal, \$1; for live ancestry, 25 cents; dead ancestry free; produce under dams free.

KALAMAZOO, Mich., Feb. 2, 1880.

I know Hop Bitters will bear recommendation honestly. All who use them confer upon them the highest encomiums, and give them credit for making cures - all the proprietors claim for them I have kept them since they were first offered to the public. They took high rank from the first, and maintained it, and are more called for than all others combined. So long as they keep up their high reputation for purity and usefulness, I shall continue to recommend them - something I have never before done with any other patent medicine.

J. J. BABCOCK, M. D.

Any one kind of grain will not satisfy or fulfil the requirements of the animal economy, and keepers of poultry should strive to procure a liberal supply of different kinds for their fowls, and feed in rotation as they need it.

After eating each meal take a dose of Brown's Iron Bitters. It helps digestion, relieves the full feeling about the stomach.

UNIVERSAL TESTIMONY

-IN FAVOR OF-

"KIDNEY-WORT"

THE GREAT SPECIFIC FOR KIDNEY DISEASE, LIVER TROUBLES, MALARIA, CONSTIPATION, PILES, LADIES' WEAKNESSES AND RHEUMATISM.

Terrible Kidney Disease.

"Mrs. Hodges says I cannot too highly praise Kidney-Wort," says Mr. Sam. Hodges, Williamstown, W. Va. "It cured my terrible kidney disease. My wife had to turn me over in the bed, before using it."

Severe Kidney Disease.

"I was entirely cured," recently said Mr. N. Burdick, of the Chilcopee Box Co., Springfield, Mass., of severe kidney disease by using Kidney-Wort."

Could Not Work Before.

"I've had no pains since I was cured by Kidney-Wort," said Mr. Jas. C. Hurd, of the Chilcopee Box Co., Springfield, Mass. "I couldn't work before using it, so great were my kidney difficulties."

Kidney and Liver Troubles.

"Several doctors failed," writes N. Steep, Alleghany City, Pa., "but Kidney-Wort cured my kidney and liver troubles of two years standing."

Kidney Complaint and Diabetes.

"For six years," says Engineer W. H. Thompson, of G. M. & St. Paul R. R. "I had kidney complaints and diabetes. Kidney-Wort has entirely cured me."

It Has Done Wonders.

"I can recommend Kidney-Wort to all the world," writes J. K. Bingham, Crestline, O. "It has done wonders for me and many others, troubled with kidney and liver disorders."

Constipation, Piles and Rheumatism.

I have found in my practice that Constipation and Piles in all forms, as well as Rheumatic affections yield readily to Kidney-Wort.—Phillip C. Ballou, M. D., Monkton, Vt.

Piles 16 Years.

"Kidney-Wort is a medicine of priceless value. I had Piles for 16 consecutive years. It cured me."—Nelson Fairchild, St. Albans, Vt.

Gravel, Permanent Relief.

"I have used Kidney-Wort for gravel," recently wrote Jas. F. Reed, of North Acton, Maine. "and it gave me permanent relief."

20 Years Kidney Disease.

"I had kidney disease for 20 years," writes C. P. Brown, of Westport, N. Y. "I could scarcely walk and could do no work. I devoutly thank God that Kidney-Wort has entirely cured me."

A Great Blessing for Rheumatism.

"It is, thanks to kind Providence, a great temporal blessing," truly remarks Wm. Ellis, of Evans, Colorado. The gentleman referred to Kidney-Wort and its magical curative properties, in cases of rheumatism and kidney trouble.

Rheumatism on the Bench.

A priceless jewel. J. G. Jewell, a Judge at Woodbury, Vt., says: "Kidney-Wort cured my rheumatism. Nothing else would do it."

Piles.

From Nantucket, Mass., Mr. Wm. H. Chadwick writes: "Kidney-Wort works promptly and efficiently in cases of Piles as well as kidney troubles. It's a most excellent medicine."

Ladies' Troubles.

"No medicine helped my three years peculiar troubles," says Mrs. H. Lamoreaux, of Isle La Motte, Vt., "except Kidney-Wort. It cured me, and many of my friends, too."

Over 30 Years.

"I had kidney and other troubles over 30 years," writes Mrs. J. T. Galloway, Elk Flat, Oregon. "Nothing helped me but Kidney-Wort. It will effect a permanent cure."

A Physician's Wife's Troubles.

"Domestic remedies and prescriptions by myself (a practicing physician) and other doctors, only palliated my wife's chronic, two years standing inflammation of the bladder. Kidney-Wort, however, cured her." These are extracts from a letter of Dr. C. M. Summerlin, of San Hill, Washington Co., Ga.

Settled Constipation.

"I have had kidney disease for 30 years," writes Mrs. Sarah Phillips of Frankfort, N. Y., near Utica. "Kidney-Wort has allayed all my pains and cured my settled constipation."

Lady Discharges Two Servants.

"I have not been able to do my house-work for many years, until lately," writes Mrs. M. P. Morse, of Hyde Park, Minn. "I've now surprised all my friends by discharging my two servants and doing their work. Kidney-Wort was the cause. It cured me and I'm strong."

GREAT SALE

-OF-

IMPORTED HORSES.**GALBRAITH BROS.,**

JANESVILLE, : : : WISCONSIN,

Will sell by public auction, at Dexter Park,

Chicago, Ill., Thursday, March 15th, 1883,

a large number of CLYDESDALE, ENGLISH DRAFT and CLEVELAND BAY HORSES, consisting of Stallions, Mares, Colts and Fillies, which are the gets and descendants of the

BEST and PUREST STRAINS

of blood in the old country. This is no snide or weeding out, but a bona fide sale.

The sale will begin at 1 o'clock, prompt.

Catalogues sent on application to

GALBRAITH BROS.

PATRONIZE HOME INSTITUTIONS.**KANSAS SEED HOUSE.**

F. BARTELDES & CO., LAWRENCE, KANSAS.



ESTABLISHED
1862.



Oldest and Only Exclusive Seed House in the State. Our Catalogue for 1883 of Field, Grass, Garden, Flower and Tree Seeds will be Mailed Free to anyone who applies.

TESTIMONIUM, ONE OF HUNDREDS.

SALINA, KANSAS, December 21st, 1882. F. BARTELDES & CO., Lawrence, Kas. Gents:—The seeds I purchased of you last Spring produced fine crop of the first quality. I had some Paragon Tomatoes from your seeds, 3 inches in thickness and smooth as an apple. They are ahead of any I ever saw. I was never better satisfied.

Premiums received this year from Saline County Fair, all from your seeds: First on Turnips, \$2; Tomatoes \$2; Cabbages, \$2; Squashes, \$2; Citrons, \$2. Sweepstakes for best display of vegetables by exhibitor: 1st, \$15 2d, \$10; total \$25. My township (Smoky Hill) also received a flag and a silk banner for the best township display of Grain and Vegetables, value, \$50. I have gardened in Saline county seven years. This is the bold truth, you may publish it if you like.

Please send catalogue as soon as you have it and oblige yours truly,

CHAS. BUSH, Gardn'r, Salina, Kas

GREAT JOINT PUBLIC SALE

—OF IMPORTED—

Polled Angus or Aberdeen, GALLOWAY AND HEREFORD CATTLE,

By Leverett Leonard, Hon. M. H. Cochrane and W. H. & A. Leonard,
AT RIVERVIEW PARK, KANSAS CITY, MO.,
Wednesday, Thursday & Friday, April 25, 26 & 27, '83,

Commencing at 10 o'clock a. m. each day. The sale will include

45 IMPORTED POLLED ANGUS OR ABERDEEN COWS,

35 IMPORTED GALLOWAY COWS,

45 IMPORTED YEARLING ANGUS BULLS,

35 IMPORTED YEARLING GALLOWAY BULLS and

15 IMPORTED YEARLING HEREFORD BULLS.

A grand total of 175 head, being the largest number of these breeds ever offered at public auction on this side of the water. The cows that are old enough will be with calves by their sides. The bulls will be in fine condition and fit for immediate service. They are all recently imported and are from the noted herds of Sir George McPherson Grant, Alex. Mann, Cunningham, Clark, McCormack and others, of Scotland, and were purchased without regard to cost. Among them will be found representatives of the most noted families of these famous breeds of cattle. For particulars and catalogues address

LEONARD BROS., Mt. Leonard, Saline Co., Mo.,
or HON. M. H. COCHRANE, Compton, Quebec, Can.

COLS. J. W. JUDY and L. P. MUIR, Auctioneers.

SEEDS.**THORNBURN & TITUS,**

158 CHAMBERS STREET, NEW YORK,

SEEDS FOR GARDEN AND FARM.

Catalogues Mailed Upon Application.

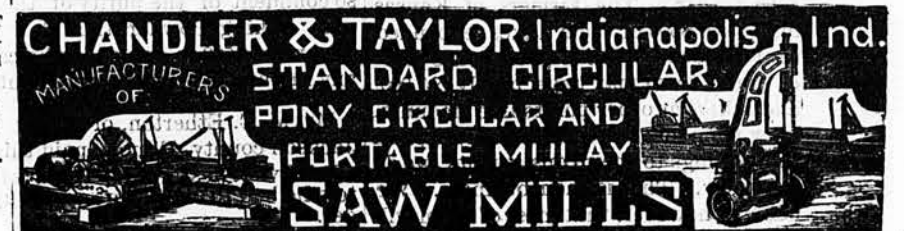


Catalogue
and Prices of

PEDIGREE SEEDS

Sent Free to
any Address.

D. LANDRETH & SONS Seed Growers,
PHILADELPHIA



HALL'S VEGETABLE SICILIAN HAIR RENEWER is a scientific combination of some of the most powerful restorative agents in the vegetable kingdom. It restores gray hair to its original color. It makes the scalp white and clean. It cures dandruff and humors, and falling-out of the hair. It furnishes the nutritive principle by which the hair is nourished and supported. It makes the hair moist, soft and glossy, and is unsurpassed as a hair dressing. It is the most economical preparation ever offered to the public, as its effects remain a long time, making only an occasional application necessary. It is recommended and used by eminent medical men, and officially endorsed by the State Assayer of Massachusetts. The popularity of Hall's Hair Renewer has increased with the test of many years, both in this country and in foreign lands, and it is now known and used in all the civilized countries of the world.

For sale by all dealers.

FOR SALE—APPLE SEED.—Prime and fresh growth of 1882 at reasonable rates. Address H. W. BLASHFIELD, Homer, N. Y.

PLANTS FREE BY MAIL.

In good Dollar Collections. Send for Illustrated Catalogue of new and fine Green-house Bedding and Hardy Plants and Seeds. Address E. S. MILLER, Wading River, N. Y.

CORN LARGEST, EARLIEST, and most PROLIFIC of any in America. Send stamp for engraving. Weight of 65 EARS 97 LBS. Grains and Potatoes. Circulars free. Address H. C. Beebe, Canton, Ill.

Early Golden | **North River Beauty**
Sweet Potato. | Irish Potato.

And many other varieties treated of in Spring Lake Experimental Farm Catalogue. Sent free to all applicants, naming "Kansas Farmer."

J. T. WILLIAMSON,
Edwardsville, Kas.

GRAPE VINES Peach, Cherry, Currant, and Raspberry. Immense Stock. Prices LOW. Catalogue free. S. J. ALLIS, Erie, Pa.

Farm for Sale.

My farm of 160 acres on Plum creek, six miles north-east of Emporia, Kansas, is hereby offered for sale. All enclosed; forty acres in pasture; sixty acres in meadow, and sixty acres in cultivation; mostly bottom; some timber, some clover meadow, and plenty of water in creek and wells; 100 peach trees in bearing; 100 apple trees, three to seven years old; some cherry, plum, blackberry, gooseberry, raspberry strawberry and grapes. Open range on two sides. School house in half mile. Fair house, cellar, stables, cribs, sheds, etc. Address, W. T. WALTERS, Emporia, Kansas.



Dana's White Metallic Ear Marking Label, stamped to order with name or name and address and numbers. It is reliable, cheap and convenient. Sells at sight and gives perfect satisfaction. Illustrated Price-List and samples free. Agents wanted. O. H. DANA, WEST LEBANON, N. H.

1838 1883 Pomona Nursery.
5,000 KIEFFER'S HYDRANGEA in Orchard, and 50,000 in Nursery, propagated exclusively from Standard. No Buds or Relays taken from DWARF. NIGHT'S SUPERB Strawberry. MAN'S BELL Raspberry. Blackberries, New varieties and Currants. Fruit, Shade, and Ornamental Trees, Vines, and Plants in variety. Catalogue free. WM. PARRY, Parry P. O., New Jersey.

SHEEP SCAB CURED
BY
LITTLE'S
CHEMICAL FLUID,
THE INFALLIBLE REMEDY.

Used COLD at all seasons of the year. Ticks, Red Lice, Borers and Tapeworms destroyed. Sore Eyes and Fly-blows cured. No CARBOLIC; non-poisonous; harmless when used either externally or internally; improves quality and quantity of wool more than cost of two dippings every year. Send for price list, testimonials and directions. JAMES HOLLINGSWORTH, 216 LaSalle St., Chicago, Ill.

NEARLY 1,000

RECORDED PURE BRED

Percheron-Norman Horses

Imported and Bred by
M. W. DUNHAM,
OAKLAWN FARM,
Wayne, Du Page County, Illinois.
85 miles west of Chicago, on C. & N. W. R'y.

468 OF THE FINEST

Imported from France by him during the past 12 months, (250 since July 1st.)



Being more than the combined importations of all other importers of all kinds of Draft horses from Europe for any previous year; and more than have ever been imported and bred by any other man or firm during their entire business career.

In these statements grade horses are not included to swell numbers or mislead. Come and see for yourselves the greatest importing and breeding establishment in the world. Visitors always welcome, whether they desire to purchase or not. Carriage at depot. Telegraph at Wayne, with private Telephone connection with Oaklawn.
—Dated Sept. 1, 1882. Send for Catalogue



JOSEPH C. MORRISON, PONTIAC, ILL.,
Importer and Breeder of Pure-Bred

NORMAN HORSES.

Carefully selected in France by myself, aided by experienced French experts. My last importation consists of 30 large and vigorous Stallions which are now thoroughly acclimated and in prime condition. I am offering this magnificent exhibition of fine Normans for sale and will warrant each horse. All inquiries cheerfully answered.



E. D. HODGSON,

EL PASO, ILLINOIS.

IMPORTER AND BREEDER OF

NORMAN AND CLYDE HORSES.

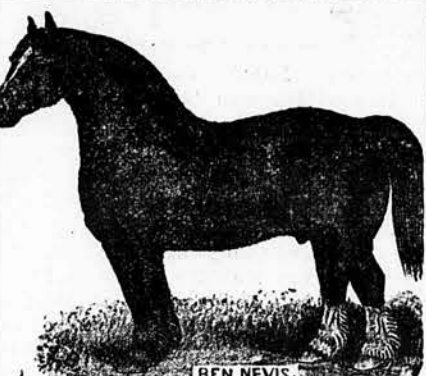
Nineteen Normans and Clydes recently imported. Thirty-five imported and grade animals of both sexes on hand. I have been breeding draft horses over 20 years, and have taken more prizes than any other man in Illinois. El Paso is 18 miles north of Bloomington, Ill. Write for Catalogue.



FRENCH AND ENGLISH DRAFT HORSES.

Imported and Graded Stock of all ages. Call and see stock and get prices.

We have first-class stock at moderate prices. Come and see and judge for yourself. Catalogue sent. GEO. W. STUBBLEFIELD & CO., 104 South Madison St., Bloomington, Ill.



H. W. GOVE & CO.,
WASHINGTON, TAZEWELL CO., ILL.

Importers and Breeders of Clydesdale, English Draft, and Coach HORSES.

Catalogues of 4th Importation now ready. Young stock for sale on reasonable terms. Correspondence solicited.

BIG Wages summer and winter; samples free. National Copying Co., 300 W. Madison St., Chicago, Ill.
40 lovely chromos, name on, 1 Model love letter, 10 love cards, all 10c. 6-50c. O. A. Brainard, Hingham, Ct.

GO TO HEADQUARTERS FOR Norman Horses

The Draft Horse center of America.



ST. LAURENT. Weight 2,100.

E. DILLON & CO. BLOOMINGTON, ILL.

The Oldest and Most Extensive Importers and Breeders in America, of

Norman Horses.

Have two large stables in Bloomington and Normal, and five farms devoted exclusively to breeding and handling NORMAN HORSES. Have imported and bred OVER 1,000 HEAD, and have been awarded over 2,500 premiums. 20 head imported within twelve months.

New Importation of 100 NORMANS

Arrived July 29, 1882.

Have now on hand over 500 head; as fine a show as can be found in the world. All imported animals selected by members of our firm in person. Illustrated catalogue of stock sent free on application. All imported and native full-bloods entered for registry in the National Register of Norman Horses. Come and see us. We can interest any lover of a good horse.

MOST EXTENSIVE PURE BRED LIVE STOCK ESTABLISHMENT IN THE WORLD.



Clydesdale and Percheron-Norman Horses

Trotting-Bred Roadsters, HOLSTEIN AND DEVON CATTLE.

Our customers have the advantage of our many years' experience in breeding and importing, large collections, opportunity of comparing different breeds, low prices, because of extent of business, and low rates of transportation. Catalogues free. Correspondence solicited.

POWELL BROTHERS, Springboro, (Crawford Co.) Pennsylvania. Mention the KANSAS FARMER.

Chester White, Berkshire and Poland China Pigs. Choice Setters, Scotch Shepherds and Fox Hounds, bred and for sale by ALEX. PEOPLES, West Chester, Chester Co., Pa. Send stamps for circular and price-list.

High Class Berkshire Swine.

The attention of Swine Breeders is called to the famous Manhattan Herd of Berkshires

Bred by A. W. ROLLINS.

This herd has won 143 high class premiums; including 58 prizes and 18 sweepstakes won this season, showing from Manhattan to St. Louis, and winning the

Grand Sweepstake Prize at St. Louis.

Also have for sale a number of Young Boars, fit for service, and a very fine lot of Young Sows, either bred or not, at very reasonable prices. Send for catalogue. Satisfaction guaranteed. A. W. ROLLINS, Manhattan, Kas.

Established in 1868.

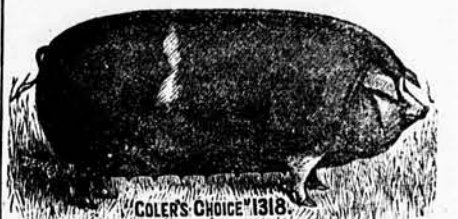


RIVERSIDE FARM HERD.

Poland and Berkshires.

I warrant my stock pure-bred and competent for registry. I have as good Boars at head of my herd as the country will afford, and defy competition. Parties wishing Pigs of either breed of any age, or sows ready to farrow, can be accommodated by sending orders. I send out nothing but FIRST-CLASS STOCK, and warrant satisfaction. Give me a trial. J. V. RANDOLPH, Emporia, Kansas.

Riverside Stock Farm.



MILLER BROS., Proprietors.

Breeders of Poland China Swine, Shepherd Dogs and Plymouth Rock Fowls. Our Spring pigs are by our boars Brag 1379; Sandhurst 1931; Roderick Du 1921, and the young boar Blackfoot by Aaron 1241; Dam 1X 4th 3210, and are coming of fine quality. Send for circular and price list. We have reduced rates by express. P. O. Address, Junction City, Kas.

MERINO PARK STOCK FARM,

Winchester, Jefferson Co., Kansas.

WM. BOOTH, Proprietor, Leavenworth, FRANK L. GIBBS, Manager, Winchester.

Breeders of REGISTERED MERINO SHEEP.

None but the very best stock that money and experience can produce or procure are used for breeders. A few choice Rams for sale, ready for service this fall.



WM. BOOTH, Leavenworth, Kas., Breeder of Thoroughbred Berkshire Swine. I am using three Boars this season, at the head of which stands Gentry's Lord Liverpool No. 3615, sire Lord Liverpool No. 221. I am breeding twelve as fine Sows as the country can produce. Most of them Registered, and eligible to registry. Stock for sale and satisfaction guaranteed. My stock are not fitted for the show ring, but for breeding only. Send for prices.

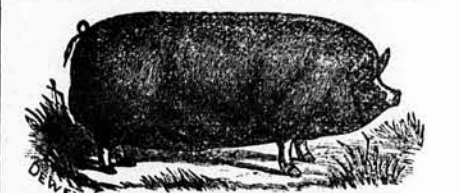


Poland China and Berkshire Hogs.

We have the largest herd of pure bred hogs in the state. For ten years past we have been personally selecting and purchasing, regardless of cost, from the leading Poland China and Berkshire breeders throughout the United States, choice animals to breed from and breeding them with much care. By the constant introduction of new blood of the best strains of each breed we have brought our entire herd to a high state of perfection. We keep several males of each breed not of kin that we may furnish pairs not related. Chang 263 and U. S. Jr. 781, American Poland China Record, and Peerless 2135 and Royal Nindennere 3317 American Berkshire Record are four of our leading males. We have as good hogs as East-rn breeders, and have a reputation to sustain as breeders here. We have over \$10,000 invested in fine hogs and the arrangements for caring for them, and cannot afford (if we were so inclined) to send out inferior animals. We intend to remain in the business, and are bound to keep abreast of the most advanced breeders in the United States. If you want a pig, or pair of pigs, a young male or female, a mature hog, or a sow impig, write us.

RANDOLPH & RANDOLPH,

Emporia, Lyon Co., Kas.



J. J. ATHERTON,

EMPORIA, : : KANSAS.

Breeder of POLAND-CHINA and BERKSHIRE SWINE.

Seventy-five choice young Berkshires ready for sale; also, Buff and Partridge Cochins, Light Brahmas, and Plymouth Rock poultry eggs in season. Terms reasonable. Write.

CONSUMPTION.

I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in this remedy that I will send TWO BOTTLES FREE, together with a VERIFIABLE TREATISE on this disease, to any sufferer. Give Express & P. O. address, DR. T. A. SLOCUM, 1st Pearl St., N. Y.

What is Grass?

In answering the question, what is grass? the Breeders' Gazette gives the following:

What is grass, may be stated as follows: The true grasses have mostly hollow stems, cylindrical and jointed, the joints closed. The leaves are alternate, two-ranked, parallel-nerved, sprit at the side where it surrounds the stalk opposite the blade; the fruit a seed-like grain, being annuals or perennials, with fibrous roots. A stalk of Indian corn is a true grass, and will furnish a good illustration of the general character of the family. The leaves will be found on alternate sides of the stem, one at each solid joint, forming two ranks or rows from top to bottom. The lower part of each leaf forms a sheath, which surrounds the stem—may, indeed, overlap it—but which never grows fast to the stem. The leaves are not notched; they are smooth. They are not separable in every direction, but easily only in one way, into fibrous strips or threads. If you apply these simple rules, you can never be deceived as to what is a grass or what is not a grass in the examination of any plant.

There are over two hundred varieties of grasses cultivated in England. In the United States there are about six hundred species of indigenous grasses, yet of the very few species of grass we cultivate, the most of them are derived from foreign sources, and undoubtedly for the reason that we have paid little attention to our native grasses; hence, the very few varieties that succeed with us. The most of our grasses have come from England, and, of course, are not suited to our dry climate.

Speaking of grasses, Prof. Shelton says:

"Those who intend to cultivate the tame grasses in Kansas cannot afford to lose sight of the fact that the agricultural experience of the eastern section of the State is, for the most part, worthless as a guide to the cultivator of our western prairies. In nothing is this so true as of the cultivation of the improved grasses. Blue grass, along the Missouri river, and for some miles westward, is a most valuable pasture grass, making the pastures of this section rivals, in point of productiveness, of the famous pastures of central Kentucky. At this point, however, as we have repeatedly shown, blue grass is almost valueless in general farming, giving but scant feed during a limited portion of the year. Timothy has proved, in like manner, almost worthless. In some respects, it may be said to be even less reliable than blue grass, as it suffers seriously from the attacks of chinch bugs and grasshoppers. A mixture of 1½ bushels of orchard grass seed and say two or three quarts of clover seed to the acre of ground, will give, in this section of the State, during an ordinarily favorable season, a stand of grass that will be very valuable either for pasture or mowing; and, where large crops of hay, and for pasture for hogs particularly are desired, alfalfa will prove to be just the thing for the man who knows how to handle it. But of all crops, avoid those grasses which are only known to be valuable "in the East."

Henry Clay was the first to import the Hereford breed of cattle to this country. They were imported in 1815.

The annual cheese product is about 400,000,000 pounds, and the butter product 1,200,000,000 pounds.

Every portion of the oleander bush—leaf, flower, bark and root—is deadly poison.

A single pea bean planted in Harmony, Me., last spring produced 857 beans.

Experiments prove that shelter pays in keeping stock nearly, if not quite 50 per cent.

There is no profit in allowing cows to lose flesh in the winter with the hope of making it up on grass in the summer.

The London News says that Europe must buy 793,000 tons of meat, and \$45,000,000 bushels of grain abroad this year.

An Ohio farmer names the Mammoth Pearl as the potato to take the place of the Peachblow, against which charges of deterioration are made.

A piece of liver or other offal placed in the poultry house will be of no benefit to the hens; also a chopped turnip or mangold will be appreciated.

A pasture of 529,000 acres near Mobeetie, Texas, is to be stocked with native cattle, mixed with some fine breeding stock from the blue-grass regions of Kentucky.

Farmers trying to make a living off worn-out lands must stop selling their calves and pigs, and sell fat oxen and hogs instead, and they will soon see an improvement in the fertility of their land and in their bank account.

Many so-called cases of pear blight are due to other causes than blight. Quite often trees are said to be blighted from too much manure, when in fact, the heavy doses of manure water would have killed an oak or butternut as quickly as it killed the pear.

A Missouri sheep-grower advises breeding from polled rams. The animals, he says, fight less, are never fly-blown around the horns, are more conveniently sheared, keep easier and grow larger. This is his opinion after nine years experience.

A successful amateur says: I transplant pansy plants early in October in a small bed, and cover them with a frame and two old window sashes. Here I can otherwise protect them and get a supply of flowers nearly all winter. The sashes are always opened on mild days to give air.

Open ditches are a relic of the past. Drain tile not only carries off the water effectually but enables the fields to be cultivated without the necessity of building crossings over ditches. Ditches get filled up, and become the harbor for weeds, insects, mice and other vermin.

DR. A. C. GIBSON'S COUGH SYRUP

THIS COMPOUND gives QUICK RELIEF in Coughs, Colds, Sore Throat, Hoarseness, Croup, Soreness of the Lungs from Coughing, Pneumonia, Pleurisy, Bronchitis, Catarrh, Asthma, Whooping Cough, Measles, and Consumption. Laboratory 1228 Grand Avenue, KANSAS CITY, MO. Sold by all Druggists. Price only 25 Cents.



THE NEW WHITE GRAPE-Prentiss.

Rockington, Moores Early, Worden, Early Victor, Vergennes, Duchess, Jefferson, Lady and all other sorts, new and old. Also, Fay's New Prolific Currant, fruit trees, small fruits, etc. Send for Price List to Wilson & McFadden, Atlantic, Iowa.

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THE STANDARD OF AMERICA.

Admitted by leading Seedsmen and Market Gardeners everywhere to be the most perfect and reliable drill ever in use. Send for circular showing improvements for 1888. Made only by EVERETT & Small, Boston, Mass. TRUMBULL, REYNOLDS & ALLEN, Agents, Kansas City, Mo.

The Sure Specific for Scab, Parasite and Tick Destroyer is



Prepared from leaf tobacco and other vegetable extracts, eradicates scab, destroys ticks and all parasites infesting sheep. Increases the growth of wool and is simple in its application—cold water only required to make up the bath. For circulars and list of Agents, address T. SEMPLE, Louisville, Ky.

Sold at manufacturers prices by D. Holmes, Druggist, Topeka, Kas.

Kills Lice, Ticks and all Parasites that infest Sheep. Vastly Superior to Tobacco, Sulphur, etc. CHEAPEST AND BEST IN THE MARKET. CARBOLIC SHEEP DIP CURES SCAB.

This Dip prevents scratching and greatly improves the quality of the wool. From one to two gallons of the Dip properly diluted with water will be sufficient to dip one hundred sheep, so that the cost of dipping is a mere trifle, and sheep owners will find that they are amply repaid by the improved health of their flocks. Circulars sent, post-paid, upon application, giving full directions for its use; also, certificates of prominent sheep-growers who have used large quantities of the Dip, and pronounce it the most effective and reliable exterminator of scab and other kind diseases of sheep. G. MALLINGBODT & CO., St. Louis, Mo. Can be had through all Commission Houses and Druggists.



THE BATCHELLER Barrel Churn; the Cheapest and Best. No iron rim in top for butter or cream to adhere to. All sizes made up to 800 gallons. Lever and Roller Butter Workers Also all sizes Box Churns for Creameries. All goods warranted as represented. Dairy churn at wholesale price where we have no agent. Send for circulars to H. F. Batcheller & Son, Rock Falls, Ill.



Duke of York and Autocrat strain. We solicit your patronage and guarantee a square deal.

R. T. McCULLEY & BRO., Lee's Summit, Mo., breeders of thoroughbred American Merino Sheep. 50 choice yearling Ewes in lamb to Rams valued at \$1,000 Each will be sold at a bargain if taken in the next 30 days; will sell in lots to suit purchasers. Also a fine lot of Light Brahma cockerels of the

KANSAS

The ATCHISON, TOPEKA and SANTA FE R.R. CO. have now for sale

TWO MILLION ACRES

Choice Farming and Grazing Lands, specially adapted to Wheat Growing, Stock Raising, and Dairying, located in the Cottonwood Valley and also in the Southwest Kansas. on the 38th parallel, the favored latitude of the world, free from extremes of heat and cold; short winters, pure water, rich soil; in

SOUTHWEST KANSAS

FOR FULL PARTICULARS, ADDRESS A. S. JOHNSON, Land Commissioner A.T. & S.F.R.R. Co. Topeka, Kansas.

LANDS

\$70 a week, \$12 a day at home easily made. Costly outfit free. Address True & Co., Augusta, Me.



A SURE CURE FOR Sick Headache, Dyspepsia, Langour, Nervous Exhaustion arising from overwork or excess of any kind, —AND FOR—

Female Weaknesses.

—IT PREVENTS—

Malarial Poisoning and Fever and Ague, And is a Specific for Obstinate

CONSTIPATION.

PRICE \$1.00 PER BOTTLE; SIX FOR \$5.00 SOLD BY DRUGGISTS EVERYWHERE.

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BAKING POWDER Absolutely Pure.

This powder never varies. A marvel of purity, strength and wholesomeness. More economical than the ordinary kinds, and cannot be sold in competition with the multitude of low test, short weight, alum or phosphate powders. Sold only in cans. ROYAL BAKING POWDER CO., 106 Wall-st., N. Y.



Mixes perfectly with Cold Water. Safe to use in Coldest Weather. It is a sure cure for all skin diseases and insect pests of domestic animals. Every farmer should keep it. For the various uses of the Dip see our paper of January.

T. W. LAWFORD, Gen'l Agent, 296 E. Chase Street Baltimore, Md. JAS. HOLLINGSWORTH, Spec'l Agent, 210 LaSalle Street, Chicago, Ill.

WHAT CAN WE SAY OR DO to Get You to TRY OUR SEEDS

Illustrated Catalogue FREE. Send the address of TEN Persons who buy SEEDS and PLANTS, and we will send you gratis a Pkt. of the new Oscar Wilde Sunflower INNISFALLEN GREENHOUSES, Springfield, O.

The Poultry Yard.

Poultry on the Farm.

We make the following extract from an address recently given by Mr. I. K. Felch before the New York State Agricultural Society.

One bushel of corn will grow as many pounds of live poultry as it will of pork. Thus does it establish the fact that it will pay you far better to feed it to fowls than to swine. One bushel and twelve quarts of sound corn, or its equivalent in other grain, will keep a fowl a year. And that the average hen will lay you ten and one-half dozen of eggs per annum, makes it certain for you to secure a profit of one dollar and twenty cents to one dollar and seventy-five cents per head, according as the price of eggs and poultry and grain are effected by the markets of your locality.

When kept in large numbers and penned in groups of twenty to thirty in coops of 12x12, and yards of 12x60 feet, they have the past year at this disadvantage produced nine dozen of eggs each.

The farmer should, in all his branches of industry, operate largely enough to secure the best results in price; yet it is not my object to convert them into poultry farming exclusively; yet he who has planted an orchard has by no means finished his work until he shall have furnished quarters in the same for one hundred and fifty to two hundred fowls to the acre, making it serve the double purpose of orchard and poultry yard. This is well done by constructing houses 15x30 feet, with "lean-to" sheds at each end 10x15 ft.; the houses divided by a close partition and fences running from the front of one to the rear of the other—each house, then, furnishing quarters for two colonies of fifty fowls each, and by the fence from one to the other dividing the orchard into half-acre fields, in which one hundred fowls are roaming, to devour all slug borers, circleo and insect life injurious to the trees, while the droppings are being absorbed as fertilizers by them.

The Busy Bee.

High Elevation for Bee Hives.

Some advise to place the hive 2 to 4 inches from the surface of the ground, in order that the bees coming home with their heavy load may not rise to the hive, as they would if it was set higher. It is not at all likely that bees in general will fly so low, no matter how they are loaded. When I watch my bees coming in, or going out (as I often do), I think they fly more like 8 or 9 feet from the ground than anything less, rising to it and falling from it only a few yards from the hive. Compare this with the top of of stores, as stated in Cook's Manual. My hives are at least 16 inches above the surface, and I think I have seen others about the same height; besides, when they are so low they are in the most impure air, composed, as it is, of carbonic acid gas. What height is considered sufficient to keep them clear of that impure air? or, as the atmosphere in so low a position is poisonous, how are creeping insects and other small animals able to thrive in it? as they are generally unable to be in any other atmosphere. Are they differently constituted? Is that which is poisonous to us, good for them? Decomposition is constantly going on, and, of course, as that goes on in the same proportion is the poisonous gas created. It is reasonable to suppose that where the gas is confined, it is most injurious, and I suppose is accounted for to some extent in that way.—*American Bee Journal*.

THE FAIRLAMB SYSTEM

CATHERING CREAM
AND MAKING BUTTER

DAVIS &
FAIRLAMB
Manufacturers of
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CREAMERY
SUPPLIES.

200 Cans sent on trial.
170 Lake St., CHICAGO. Send for Catalogue A.

AGENTS can now grasp a fortune. Over-
fit worth \$10 free. Address E. G.
RIDEOUT & CO., 10 Barclay St., N. Y.

Our Reporter's Vacation Notes.

DURING his rambles this season, our Mr. M. has taken upon himself the task of satisfying our numerous readers that whatever goods are manufactured in our goodly city of Roger Williams, are of as high a grade, and as fine in quality as can be produced in any spot on the globe. Especially is this so when the skilled Pharmacist of many years' experience resolves to extract from the finest botanical specimens of the vegetable world the most potent cure for some special disease. In proof of his assertion that Providence, R.I., affords the best, he relates an interview with an acquaintance, given him while sojourning temporarily at her residence. She says, "About a year I suffered severely from Rheumatism in my limbs, and Neuralgia in the head, which I endured two or three months with as much patience as possible, being under the treatment of an excellent doctor, and trying many kinds of medicine without any marked effect. At last a medical friend advised me to try Hunt's Remedy, because he attributed my severe suffering to the bad condition of my kidneys, which were not performing their proper functions, and I commenced taking it, and in a few days the neuralgia had departed, my headache had entirely disappeared, the swelling in my limbs and joints had gone, and I have not had a touch of it since. More recently I was troubled with impurity of the blood, which showed itself in severe eruptions on my face. I again resorted to Hunt's Remedy, and after taking it a short time was completely cured of that complaint. Hunt's Remedy has proved very beneficial to me in attacks of sick headache, which it always alleviates, and I notice the improvement as soon as I take the Remedy. This Remedy has strengthening elements, for it has made me feel much stronger, and has been very beneficial to my general health. I most heartily recommend it to all sufferers like myself. Mrs. L. G. TANNER, No. 136 Pearl Street."

Great Praise.

ALBERT G. MANN, of Cottage Home, Ill., says: "I have been prostrated for three or more years with Kidney disease; at times I was not able to put on my boots; my wife has often pulled them on for me. I was not so bad as that all the time, but I never knew what it was to be without pain in my back until I commenced using Hunt's Remedy. Since I began to take Hunt's Remedy I have been free from all pain, and take pleasure in saying that it is the best medicine that I ever knew for Kidney and Liver disease."



Lydia E. Pinkham

LYDIA E. PINKHAM'S VEGETABLE COMPOUND.

A Sure Cure for all FEMALE WEAKNESSES, including Leucorrhoea, Irregular and Painful Menstruation, Inflammation and Ulceration of the Womb, Flooding, PRO-LAPSUS UTERI, &c.

Pleasant to the taste, efficacious and immediate in its effect. It is a great help in pregnancy, and relieves pain during labor and at regular periods.

PHYSICIANS USE IT AND PRESCRIBE IT FREELY.

FOR ALL WEAKNESSES of the generative organs of either sex, it is second to no remedy that has ever been before the public; and for all diseases of the KIDNEYS it is the Greatest Remedy in the World.

KIDNEY COMPLAINTS of Either Sex Find Great Relief in Its Use.

LYDIA E. PINKHAM'S BLOOD PURIFIER will eradicate every vestige of Humors from the Blood, at the same time will give tone and strength to the system. As marvellous in results as the Compound.

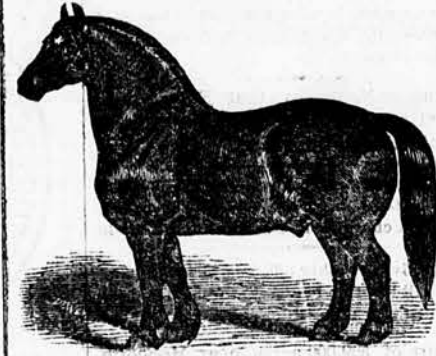
Both the Compound and Blood Purifier are prepared at 233 and 235 Western Avenue, Lynn, Mass. Price of either, \$1. Six bottles for \$5. The Compound is sent by mail in the form of pills, or of lozenges, on receipt of price, \$1 per box for either. Mrs. Pinkham freely answers all letters of inquiry. Enclose 2 cent stamp. Send for pamphlet. Mention this Paper.

LYDIA E. PINKHAM'S LIVER PILLS cure Constipation, Biliousness and Torpidity of the Liver. 25 cents.

Sold by all Druggists.

A sure cure for epilepsy or fits in 24 hours. Free to poor. Dr. K. RUBE, 2844 Arsenal St., St. Louis, Mo.

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VIRGIN & COMPANY,
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We Have More Prize Winners than
any Stud in the United States.

We took Six First Premiums, including Sweepstakes on all ages at the Illinois State Fair, Sept., 1882. Have made Four Importations in the past year.

Have Horses and Mares, all ages, For Sale.

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ARE THE VERY BEST
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FISH BRAND SLICKERS
WILL NOT STICK OR PEEL.

TOWER'S
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ARE NOW USED BY EVERY
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WHO EVER GAVE THEM A TRIAL.

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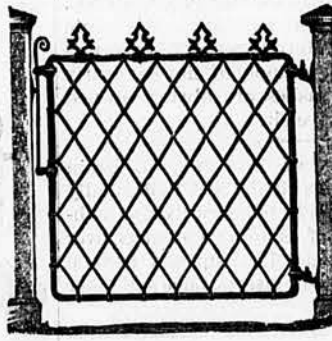
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WILL KEEP YOU DRY.

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EVERY COAT WARRANTED.

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COMPLETE, \$5 00 EACH.

"Wire Netting Fence," for Farms,
Lawns, Cemeteries, Sheep, &c., cheap
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your town, write for illustrations to
the manufacturers,

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YOU SHOULD SUBSCRIBE FOR THE PRACTICAL FARMER

Have taken "Practical Farmer" 21 years. It is one of the best agricultural weeklies.—A. Scott, Del. Co., Pa. Been a subscriber for 25 years; find it a pleasant and helpful visitor.—C. V. Gritz, Manon, Pa. The second paper I read on life. I have taken "Practical Farmer" 20 years. Consider it indispensable in every farmer's family.—J. W. Gritz, Whiteburg, Del. Samples of letters received daily, laden with good things concerning Agriculture, the Garden, Horticulture, Live Stock, the Apiculture, etc. Its "Family Circle," "Youth's," "Household," and "Hygiene" departments contain the ripest thoughts of well-known writers. Everything perverted of pure morality is excluded from its columns. Its complete market reports keep the farmer posted on current prices of farm products. The paper has excellence for all engaged in rural pursuits.

To enable you to become its practical friend, as thousands have already done, we offer to send it on trial for six months, 24 weeks, and make you a free gift of a beautiful sugar and salt spoon, per issue (the 4 cts. above the subscription being the exact cost of packing and mailing the spoon). These goods have been secured after much patient hunt, in order to give our readers something of intrinsic worth. Had we a base of hardened steel, nickel plated, and then heavily plated with pure gold silver, they are still attractive and durable. There will be no delay in sending off these premiums, we have them on hand (having purchased the manufacturers' entire stock) and want you to have them. The PRACTICAL FARMER is now in its 25th year, and its publishers have earned an enviable reputation for promptness and reliability in dealing with its patrons. A paper that can hold its subscribers for over twenty-five years, must possess high character and its publishers be thoroughly responsible. It has never made a promise to its subscribers which it has not promptly fulfilled. Four neighbors may club and remit money order for \$2, and spoon (four sets) will be sent with nearest month's issue.

ONLY 54 cts.

MAKE HENS LAY

An English Veterinary Surgeon and Chemist, now traveling in this country, says that most of the Horse and Cattle Powders sold here are worthless trash. He says that Sheridan's Condition Powders are absolutely pure and immensely valuable. Nothing on earth will make hens lay like Sheridan's Condition Powders. Dose, 1 teaspoonful to 1 pint food. Sold everywhere, or sent by mail for 8 letter-stamps. I. S. JOHNSON & CO., BOSTON, MASS.

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who farms for profit should use
OUR SOIL PULVERIZER.

Strongest, Simplest, most Durable CLOD CRUSHER in the field. Send for circular.
H. P. DEUSCHER, Hamilton, Ohio.

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LARGEST CHEAPEST-BEST
KANSAS CITY, MO., J. F. SPALDING, PRES.

250 FINE OHIO SHEEP for sale; 5 miles north of Kelgley. Address, Thalman & Conkey, Kelgley, Butler county, Kansas.

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TALES OF THE BORDERS.

The most captivating narrative of early border life ever written. A Boon for Old Agents and splendid Starter for Beginners. Agents are now selling 10 to 15 books per day. We want an Agent in every town. Send for terms and circulars, free.
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For Home Garden. Our 12-
LUSTY GARDEN MANUAL is
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CURE FITS!
When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Also Express and Post Office. It costs you nothing for a trial, and I will cure you. Address Dr. H. G. ROOT, 188 Pearl St., New York.

THE STRAY LIST.

(Continued from page 15.)

Jackson county—John Q. Myers, clerk.
STEER—Taken up by M. Fankopf, in Franklin tp. Feb. 9, 1883, one white 2-year-old steer, branded on left hip with indistinct brand, crop off right ear; valued at \$15.
PONY—Taken up by Jacob Shoff, in Franklin tp. January 17th, 1883, one brown horse pony 4 years old, right hind foot white, about 12 hands high; valued at \$15.

Johnson County.—Frank Huntoon, Clerk.
STEER—Taken up by John Marty, four miles south-east of Shawnee, one light red 2-year-old steer, star in forehead and a little white on each flank; no marks or brands; valued at \$25.

Strays for week ending Feb. 28, 1883

Jefferson County—J. B. Best, clerk.
HORSE—Taken up by Jos. Smelser, in Kaw tp, January 20, 1883, 14 years old chestnut sorrel horse, right hind foot and right fore foot white, little white on forehead.

Chase county—S. A. Breese, clerk.
COW—Taken up by Robert Matti, in Toledo tp. December 19, 1882, 1 red and white cow, 4 years old; valued at \$25.

Nemaha county—Joshua Mitchell, clerk.
STEER—Taken up by Joel D. Meyer, in Washington tp. February 2, 1883, 1 two years old red and white spotted steer, two slits in right ear; valued at \$22.

Woodson county—H. S. Trueblood, clerk.
HEIFER—Taken up by Daniel Johnson, in Liberty tp, January 12, 1883, one red yearling heifer, white stripe in forehead; valued at \$12.

STRAWBERRIES. Downing, Wilson, Bidwell, Mount Vernon, Crescent, Sharpless, and all the latest novelties.
RASPBERRIES. Turner, Thwack, Cuthbert, Gregg, Hopkins, Miami, etc.

POTATOES.

Beauty of Hebron, Mammoth Pearl, Early Ohio.
 Price-list free to all applicants.

B. F. SMITH,
 P. O. box 939, Lawrence, Kansas.

CANE SEED.—Early Amber and Early Orange seed for sale at \$1.00 per bushel. Good Cane seed for sowing at 50 cents per bushel. X. K. STOUT, Troy, Kansas.

SORGHUM, SORGHUM!

Harper's Sugar Evaporator is the best and cheapest. Send for price list and description.
HARPER BROS., Lane, Kansas.

JACK FOR SALE.

The undersigned will sell his jack if called for soon. Said jack is 4 feet 5 inches high; stout built; dark brown; 4 years old next June; in fine condition. Call on the undersigned, 3 miles southeast of Manhattan, Riley Co., Kas.
P. M. DEVER.

MARYLAND FARMS.—Book and Map free by O. E. SHANAHAN, Atty. Easton, Md.

MAMMOTH PEARL POTATOES.—I have a choice lot of the above potatoes that I will sack and put on the cars at \$1.25 per bushel. S. W. HINCKLEY, Brenner, Doniphan county, Kansas.

Strawberries.—Sixteen choice varieties, such as Charles Downing, Crescent Seedling, Capt. Jack, Cumberland Triumph, etc. Address, S. L. IVES, Mount City, Kan.

WORTH SENDING FOR!

Dr. J. H. Schenck, of Philadelphia, has just published a book on "Diseases of the Lungs and How they can be Cured," which is offered Free, postpaid, to all applicants. It contains valuable information for all who suppose themselves afflicted with, or liable to any disease of the throat or lungs. Address Dr. J. H. SCHENCK & SON, 538 Arch St., Philadelphia, P. O. Box 2838.

I will sell, privately, FOURTEEN BULLS,

of the following families: 2 Cruickshank Orange Blossoms, 4 Young Marys, 2 Aylesby Ladies, 1 Lady Elizabeth, 1 Annabella, 1 Milk Spring, 1 Phoenix, 1 Rosemary, and 1 Beauty. Prices reasonable. For catalogue and particulars, address
J. C. STONE, Jr., Leavenworth, Kas.

WANTED—FARM FOREMAN.

Must be temperate, honest, a good farmer and well acquainted with the management of pure-bred stock. No others need apply. A married man, English or Scotch, preferred. Wages \$40.00 per month and good house. The right man will find a good place. Address the Editor of this paper.

Russian Mulberry.

I will forward by mail, prepaid, 100 cuttings for \$2.00; 50 cuttings for \$1.00; 25 cuttings for 50 cents. Also, one dozen one-year-old trees for \$1.00.

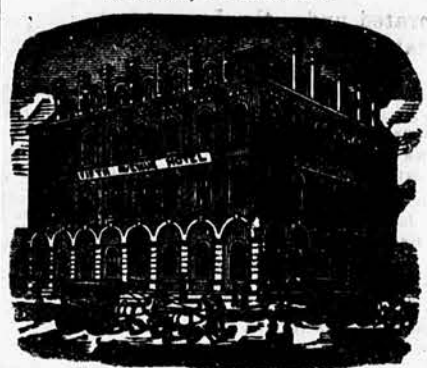
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And large stock of Apple, Pear, Plum, Cherry, Apricot Quince, Grape Vine Gregg Raspberry, Snyder's Blackberry, and small fruits, Evergreens, Roses, etc. The best shipping point and best facilities for packing dealers of any establishment in the West. Orders from planters given special attention. Prices on application.
KELSEY & CO.,
VINELAND NURSERIES,
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Red Cedars and Forest Tree Seedlings

We have the largest stock in the West of Red Cedars, Forest Tree Seedlings, Hardy Catalpa, Strawberry and Raspberry Plants. Write us for price-lists.
 Address **BAILEY & HANFORD,**
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 324 W. 5th St., Kansas City, Mo.

STALLION SEASON

—AT—
NORWOOD STOCK FARM,
1883.

The standard-bred trotting horse
Almont Pilot,

The highest bred stallion in America—bay, 16½ hands high, weight 1,500 pounds; sired by Almont, the sire of W. H. Vanderbilt's Aldine and Early Rose, the fastest double team in the world,—record 2:16½ at Hartford, October, 1882. Also twenty others with records of 2:30 and better.

First dam Lucille, by Alexander's Abdallah; 2nd dam by Pilot, Jr. Almont, by Alexander's Abdallah; 1st dam by Mambrino Chief; 2d dam by Pilot, Jr. Service—\$25 for the season. Payable Jan. 1st, 1884. Young stallions for sale; also Jersey bull and heifer.
E. A. SMITH.

HAZELWOOD

Poultry and Egg Farm

DAVIS & NYE, - - LEAVENWORTH, KAS.

Forty varieties of the leading Land and Water Fowls, including Brahmas, Cochins, French, American, Plymouth Rock, Hamburgs, Polish, Leghorns, Spanish, Dorkings, Langshans, Guineas, Bantams, Ducks, Geese and Turkeys.

Our stock exhibited by Wm Davis at St. Jo. Bismark, Kansas City and the great State Fair at Topeka this fall (October, '82) won over 200 1st and special premiums.

Will issue fine catalogue and price-list in January, 1883.

P. S.—As we wish to retain as many hens and pullets as possible until March, we offer for sale at low prices for the quality of the stock, a large lot of cockerels of all the leading varieties, either for choice breeding or to grade up your common fowls. Price according to quality.

EVERGREENS.

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