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TOPEKA, KANSAS, THURSDAY, APRIL 18, 1889.

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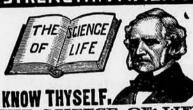
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St. Louis wool Market. Prof. Snow's Weather Statistics.

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Agricultural Matters.

Sowing Spring Wheat,

[This communication was handed in some weeks ago and ought to have been printed early, but it was overlooked in the vast amount of our correspondence until this week.—EDITOR KANSAS FARMER]

EDITOR KANSAS FARMER:-We ad-

dress this letter to you about a muchabused and at present disused cereal in order to challenge the attention of farmers to a crop, the raising of which has been placed under ban, and the whole subject of raising spring wheat has been placed by our farmers in the criminal code of agricultural customs. The farmer who will sow spring wheat, says one, ought to be horsewhipped: or prosecuted for malicious injury to neighbor farmers, says another. And thus spring wheat has become a sort of agricultural scapegoat for all the ravages of the chinch bug. But, somehow, while we have made spring wheat the scapegoat, loaded it with all the wickedness of the chinch bug, and driven it deep. Another good way: Break up all entirely out of our State, and kept it out for ten years at least, still we have eughly, and drill the seed in deep, one the chinch bug with us just as lively and as full of wickedness as ever. Now, to provoke discussion among farmers upon this subject is partly the object of this letter, and if spring wheat is proven a criminal, let us devise some reforming process which shall make it again so useful an adjunct to our success in agriculture. There is no denying the value of this crop to farmers. If the winter wheat crop is destroyed by the rigors of winter, another chance is left the farmer, by the sowing of spring wheat, and if he has more land than can be profitably put to corn or oats, spring wheat is a profitable crop to take the place. It is necessary for the farm to get hold of all the chances that are in his favor to make farming pay in this Western country, so far away from the markets of the world. This year seems to promise a favorable season for sowing wheat to supplement other crops. But the danger of breeding chinch bugs will deter many farmers from putting in this convenient and probably profitable crop. As for ourselves, we are very estimated by the length of their articles. sceptical about a spring wheat crop First, I select the earliest variety I can breeding chinch bugs more than any other crop, but do think the tender and succulent blades of the young spring after me to drop every sixteen to wheat is a much more acceptable dish eighteen inches apart. While he makes for the pampered, luxurious chinch bug than the tougher fibres of most other growing crops; and so they follows right back, which drops every swarm about a spring wheat field as third furrow. Nothing is done to them flies about a freshly-emptied molasses until they are up, at which time I give

even chance with other crops, the growing herbage must be made as distaste- Kansas. ful to the festive chinch bug as are other growing crops. How to do this, then, is the one thing needful, and we believe can be accomplished, and at the same time give a vigorous growth to the crop and increase the chances for a larger yield.

To those of our farmers who contemplate putting in spring wheat, we advise to provide themselves with salt, and after your spring wheat is up .two or three inches, sow broadcast 200 to 300 pounds to the acre. It will have a ravages of chinch bugs, and add a product of better crops. It has been tried in Wisconsin with excellent effect for both purposes, and it should be equally as efficacious in Kansas. Indeed, there are hardly any crop that will not be benifitted by a dressing of salt; and now that salt is being produced so cheap in our own State, the question of cost is not a very grevious one. In conclusion, we quote a Wisconsin farmer. "The first time I tried it was on a twenty-acre lot sowed with spring wheat. In two weeks I could see the difference between what I sowed with salt and that which had received no salt, and I could also see the difference when harvested. The part sowed with salt had no chinch bugs, while on the other which had no salt I could gather a gill to every sheaf the reaper threw off. I have never seen any damage done by chinch bugs when there had been 200 pounds of salt sowed broadcast on the crop."

S H. DOWNS. Topeka, Kas.

About Sowing Oats.

EDITOR KANSAS FARMER: - I will make the following suggestions: Corn stubble has proved the best oat ground in this vicinity, the oats being sowed and plowed under three to four inches the stalks, harrow the ground thorand one-half bushels to the acre. All oats land should be well harrowed before drilling. It requires more seed when sowed and plowed under than it does when drilled. The Texas Red makes the best yield and is a sure crop when pnt in from last week in February to middle of March. The Texas oats is rust-proof, and matures two weeks earlier than any other variety. Another feature is, when sown early they are not affected with the freezing like other varieties, and for this reason they are superior for winter pasture. I plowed thirteen acres of stubble after cutting my oats, and it kept twelve head of horses and mules until the first day of January, and they improved all the time. This is why I value these oats H. C. HODGES. so highly. Danville, Harper Co., Kas.

Potato Culture in a Nutshell.

EDITOR KANSAS FARMER:-Your correspondents on potato culture make too much work for the amount of inget, cut the largest; then commence to back-furrow a land, start a hand right one through, I make a round and ahalf, overtake him at the other end; he

barrel. There are more chinch bugs to a thorough harrowing, cultivate from the square yard in the wheat field, but two to three times, (too dry here to hill the neighborhood has been drained to up very much). At digging time I take populate the wheat field. If this be the lister, which throws them out both true, then, to give the spring wheat an ways. The time for monkeying with the hoe in farming is past in Western H. E. Faidley.

Burr Oak, Jewell Co., Kas.

P. S.—The farmers in Jewell county are unanimous on the twine trust. We will bind whatever we can and the bal-HEF. ance we will stack loose.

About Seed Corn.

EDITOR KANSAS FARMER: - Some one asks through the FARMER the experience of farmers with Leaming and other corn. The Laming was planted in this vicinity by three farmers wholesome effect in preventing the with poor success, yielding less than other corn by the side of it. The chinch valuable auxiliary to the soil for the bugs have some preference for it, besides it is not a dry-weather corn. The corn for Kansas should be home-grown seed, carefully. If it could be got, should be of the early dent variety, golden yellow, of medium sized ears that make no more cob than it fills with grains, sets close to the stalk, not more than one or two inches from stalk to ear, medium to small stalk, not taller than from seven to nine feet, not inclined to sucker. Suck corn grown on one farm for five years, seed carefully selected every year, will succeed if any corn will.

> The best way to select seed is to select one or more ears of the best type you can get and plant in some spot by itself and give good tillage. Such will nearly all do for seed. W. W. MILL.

Riley, Kan.

Lister vs Planter.

EDITOR KANSAS FARMER:-Which is the better implement? This question was very thoroughly discussed this winter by our Literary Society. Those who discussed the question were practical farmers who had used both implements, and therefore well able to state their merits and demerits.

For the lister it was claimed, and I think correctly, that it saves labor in putting in the crop; throws the weed seeds away from the newly-planted corn, thereby enabling the plant to get the full value of the soil at the start; that it puts the corn deep into the ground, enabling it to withstand drought and winds better, and that by planting one grain in a place, a stronger stalk and a larger and sounder ear is pro-

By using the planter it was argued that a seed bed was put into proper condition, which is an essential in correct farming, before the seed was placed therein; that the crop could be planted early, which is impossible with the lister; that the cultivating is easier done by both man and beast the first going over; that if the ground is properly prepared, that is, plowed deep and thoroughly pulverized, the roots will go as deep, if not deeper than when the lister is used; and that corn planted with the planter, when blown over, will produce a good ear of corn, while the listed corn breaks off under a high wind and the ear fails to mature.

Personally, I think that the implement cuts a small figure in the production of a crop of corn; the complete preparation of the seed bed, thorough cultivation, and plenty of rain being J. H. QUEEN. the essentials.

Grantville, Jefferson Co., Kas.

"After a varied experience with many socalled cathartic remedies, I am convinced that Ayer's Pills give the most satisfactory results. I rely exclusively on these Pills for the cure of liver and stomach complaints." -John B. Bell, Sr., Abilene, Texas.

Diseases of Poultry.

A few hints with respect to the diseases of fowls will be useful, as "forewarned is forearmed" in this as in every other instance where disease is concerned. Disease is caused in various ways, and there is no doubt but that if individuals, for themselves and for their animals and birds, always acted in a sensible and careful manner, there would be very little of it. But as this is not so, and as complaints are often generated in a way quite unexpected, we must be prepared for them if we are to succeed in gaining the mastery. Amongst highly-bred stock hereditary tendencies have a great deal to answer for. There is a law of nature which provides that the offspring shall copy the parents, and we thus find the secret of many unhealthy fowls. A fancier who has a highly bred and fine race of fowls may be tempted to breed from such birds as show some weakness or disease, in the hope that a few of the chickens may not reproduce it, and he is willing to take the extra trouble involved, hoping the exhibition qualities may not be injured; but the ordinary poultry-keeper, to whom the strength and hardiness of his poultry are most important, should never knowingly keep a bird with a hereditary disease, and breeding from such is simply suicidal. Such birds should be killed forthwith, as it is only by stamping out that these diseases can be got rid of. There are many other diseases which are caused by housing, improper accommodation and dirt. These can always be avoided by proper attention, and hence the great importance of seeing that the houses are comfortable, clean and well ventilated. It is impossible to lay too great stress upon a question like this, as it is really at the basis of successful poultry-keeping, and the diseases caused by neglect of the things we have mentioned generally affect the respiratory organs, the head and legs. Then, finally, there are diseases consequent upon bad feeding, which may mean too much, too little or too rich food. Many people kill with kindness, and their desire to feed well brings on all sorts of diseases by the superabundance or richness of the same. Others pay no attention to the quality or quantity of food given, with the results that sometimes—especially on farms—the birds have far too much, and at other times too little food. When the latter is the case the birds starve, when the former they gorge themselves. The diseases caused by over-feeding are apoplexy, crop-bound, diseases of the liver, of the skin and of the bowels, and by under or irregular feeding, poverty of blood, followed by affections of the skin, bowels

followed by affections of the skin, bowels and legs.

It is necessary to unter a note of warning with respect to purchased birds, and that is not to put them amongst the other fowls for a few days, until it is seen whether they are perfectly healthy, which will be apparent within four or five days. Many a poultry yard has been ruined by the importation of disease in this manner, and perhaps not the fault of the seiler, as a bird may take cold and get roup while on a journey, giving the same to the birds among which it is put. By the plan we have recommended all fear of this is obviated.

One of the great difficulties in the treat-

One of the great difficulties in the treatment of poultry is to find symptoms which will give an idea of what the disease is. The ment of poultry is to find symptoms which will give an idea of what the disease is. The skin, being covered with feathers, provides no accurate guide, and therefore cannot be depended upon. In the descriptions of various diseases as we speak of them we will give as far as possible, a guide which will enable the poultry-keeper to form a pretty correct idea, and to those we must refer him, simply stating that a bird affected with cold will snow it in the nostrils or eyes, and one affected in the bowels or general system will show the same by the breath or evacuations, but probably the first sign will be the bird moping about, its feathers ruffled and its whole aspect denoting that there is something wrong. As soon as this is seen it should be at once separated from the rest, in order to prevent its communicating the disease to them, should it prove to be a contagious one. Often birds are restored by being put into a comfortable place for a few days, but the neglect of this may cause trouble, expense and loss afterwards. In large yards a place should be set aside for the purpose of a hospital, to be used only for this purpose. It should be warm and comfortable, and have no communication with any of the ordinary runs or houses. After every

pose of a hospital, to be used only for this purpose. It should be warm and comfortable, and have no communication with any of the ordinary runs or houses. After every inmate it will require to be whitewashed and thoroughly cleaned out so as to purify it and exterminate all the germs of disease.

When fowls are not at all valuable it may be the cheapest way to kill off at once any found suffering from a contagious disease, for those are often tedious to cure, and more money may be spent over them than the birds are werth; put when the complaint is not of this nature it is a pity to do so, and if the directions we shall give are followed a cure will generally follow.—Farmer, London, Eng.

don, Eng.

The Stock Interest.

THOROUGHBRED STOCK SALES.

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

PRII. 23-24—G. & J Geary, Aberdeen-Angus Cattle and Shire, Yorkshire Coach and Cleve-land Bay Horses, Dexter Park, Chicago.

SHEEP FOR THE GENERAL FARMER By Hon. L. S. Coffin, in Sheep Breeder and Wood

My earliest recollection of farm life is that of mixed farming. In the old neighborhood where I was born, and where my first work on the farm began,

every farmer kept more or less sheep.

Sheep-washing day, where the farmers joined farms, and drove their small sheep some two or three miles to the pond, was one of the days that left its mark upon the tablet of a boy's memory. The jug of rum was deemed almost as necessary as the pond. All must drink in order to keep from taking cold from being so long in the water; that is, the men and boys did, but the poor sheep could stand it. No rum for them. Minister, deacon, layman of the church, and he who walked the broad road with the many, drank in those days and nothing was thought of. It seems but as yesterday when that sheep washing, cider and rum-drinking was. I look again into the great open fire-place where my mother had cooked the generous meal for the hungry men folks as they return from that day of work in the water. I hear again the click of the sheep shears as father rolled off the fleece from those sheep a week after they had been washed. I see my mother and older sisters picking over the wool and greasing it, so making it ready to send to the carding mill. I hear again the hum of the great wheel up in the open chamber, and the thud of the loom as those rolls from the mill are spun and woven in the cloth that was to make my trousers and jacket for the next winter. Although those old-time scenes come back and seem so near, yet what changes have taken place in the swift-flying years that have come and gone since then. The old loom and wheel have disappeared, the old open fire-place and the great-mouthed oven near it, are seen no

The jug of rum and the c.der mug is also nearly of the past.

Those strong men, too, who, to my boy eyes, were like giants in strength. who handled the sheep so easily, are also gone. I search in vain for a single one of that neighborhood sheep washing company. All are gone. I alone remain. But I go back to that past for a purpose. That farm neighborhood was amid the rocks and hills of New Hampshire. Those farms were smallabout one hundred acres. Two acres of corn, one of potatoes, a patch of beans, three acres of wheat, oats and rye, all together made an average of yearly cropping. Three to eight cows, two yoke of oxen and a complement of young cattle, one horse and from twenty to fifty sheep, with a few hens, geese, and sometimes a turkey or two, and two or three hogs to fat, comprised the stock of the average farmer of that locality. This seems small to us to day, but let me say those farmers lived well and prospered. Often have I heard my father say that the sheep cost him the least for keeping, and still paid him the best of anything on the farm. In those days fat cattle and sheep went to market on foot, in droves. The male lambs and fat wethers were sold to the drovers, and I well recollect that when the lambs brought the Yankee 9 shillings (\$1.50), it was thought to be a good price. And then the wool-but little of looked, our nation is rapidly learning to would be almost, if not quite, equal to

this was sold as wool. It went in the form of yarn, socks, mittens, blankets, woolen cloths, sometimes in rolls. In those days of homespun the sheep was an absolute necessity on the New England farm. It was the one domestic animal that never died in debt to its owner. It was a constant source of income, yielding semi-annual dividends. Now we are apt to think that in those days of rural simplicity and home-made wear that a great deal more wool was needed to the individual than in this later day of fashion and fast living. In this we are mistaken. Going back a half of a century we find that although our population has increased so marvelously, yet the consumption of woolens has more than doubled per capita at the same time. While forty years ago we used three pounds of wool per capita, to-day we use 6 6 pounds per individual. Here is a fact of tremendous import, and it is this one fact I wish to impress upon the minds of the wool-growers. The demand for woolen goods is not governed merely by the increase of population, while that is great, but the desire of each individual has been call ing for more woolen wear, until to-day each one is consuming more than twice what he did forty and fifty years ago Think of it! While there has been this wonderful increase per capita in the use of woolens, there has not been a corresponding increase in the number of sheep. At first thought this fact would seem discouraging to the sheep men, but the reverse is true. By skillful breeding, the clip of wool from our sheep—I mean the fleeces—have doubled in weight, one sheep now producing what it took two to give twenty five vears ago.

It is well for us to keep this important fact in mind. We are an organization of breeders not only of improved stock, but we are also trying to be improved breeders of improved stock, and here in this fact just brought out is shown the value of such an organization. By a wise improvement in our calling we can double our incomes by lessening the cost, viz.: by getting as much from one as formerly from two and the product of all for the same per pound or per head. I should now, without further delay, come to the more practical part of this paper. The object is to encourage the general farmer, when practicable, to keep some sheep, and it is practicable much more universally than is commonly supposed.

Allow me to again repeat this one fact, to-day this nation is annually consuming over twice as much woolens per capita as it did forty years ago. Sheepkeeping then by the average farmer was better paying as a rule than other stock. Somebody must grow this enormous amount of wool used to day by our greatly increased population.

In the first place, as an incentive to this, let me say, there need be no fear but that there will be a paying demand for wool-take into account the immense rapidity of increase of our population. Also the now fixed fact of the absolute superiority of our woolen fabrics for clothing as more conducive fact, of all the imported wools but a very small per cent. enter into the manufacture of cloths. Over threefourths of all the imported wools are the coarse cheap kinds (which we do not grow) and they enter into the manufacture of carpets. Our own homegrown wools as a rule supply our own mills and will. With the increase in weight of fleece there is more profit in wool to-day at 25 cents than twenty years ago at 40 cents.

eat mutton. Look at the market reports for the year past, beef low and fluctuating, sheep firm and in good demand. While we are not politicians, still we are at liberty to recognize public facts, or at least public probabilities, and one of the probabilities that come so near a fact as to demand a microscope to detect the difference is that the wool growing industry will not be injured by national legislation in the very near future, whatever our individual views on such matters may be I am inclined to think that a man

might go into wool-growing as a business and do as well for the capital in vested and labor bestowed as in cattle horses or hogs, or all combined. Still, unless he is a born sheep man, and loves a sheep, I would not advise this course. Lat me say, however, right here, if a man is the born sheep man, he is the man to do this. Let other stock alone and be a sheep man, as some of you are Short-horn men. There are, or can be, Moningers and Barclays in sheep husbandry as well as in Shorthorns. I am often in doubt about my own work; my leanings are to the sheep. For twelve years I made it a specialty to grow wool; my success in that line was better than in any special line before or since. I confess I love to handle sheep, and I may yet return to my first love. But I want to say that unless a man is such another hater of sheep as the distinguished statesman who would go out of his way half a mile to kick one, he cannot go far astray if he will make his plans to keep a few sheep on his farm. I cannot make myrelf understand how a man can be a full farmer and not have a flock of sheep on the farm, small though that flock may be. If it (the flock) is quite small, then they can run in the general pasture with the cattle; but if the farm is not large and the pasture pretty well crowded with other stock, I would advise a separate pasture for the flock. I do not think eattle like to graze on ground where sheep frequent a good deal, that is, the same year. Let sheep have a pasture this year and then change to another, and let cattle roam where the sheep were the year before, and you will at once see the good of sheep in the luxuriant growth of grass and freedom from weeds. One great good from sheep in the common pasture is the keeping down of weeds, the sheep eating the tops off before going to seed Already we hear of trouble in pastures for dairy cows; the weeds coming in so thick as to give bad flavor to butter. Sheep will in a great measure remedy

But the first thing that confronts the average farmer, when thinking of keeping some sheep, is the fence question. Three barbed wires will answer to turn common stock, but not sheep or hogs. While I fully appreciate this difficulty, this bugbear of mere expense in farming, still I think I have rightly named it "bugbear." Two more wires will accomplish it. Now, what is the additional expense, after the posts are all set and the three wires on ?-or I had better say four, for four are as little as any one should try to get along with to health than of any other. Another Say your pasture is an eighty. This one will feel from the fact of knowing he has a complete fence will be worth all it cost, even if he kept no sheep. His calves are always in the pasture. and neighbors' calves are out. Then he can put twenty-five to fifty sheep on that pasture with his other stock, and scarcely know they are there from the grass they eat; and in two or three years the increase in the growth in the Another thing must not be over- grass and the keeping down of weeds

what grass the sheep did get from the other stock.

While I have not the facts to back up what I am about to say, and realizing also that this body of breeders tear theories that are mere theories to shreds here, and handle their author without gloves, still I want to say, as a matter of judgment, that in a series of years, one sheep to an acre where other stock is pastured is as much of help as detriment; and the eighty-acre pasture will carry, for a term of years, as many head of other stock as it would with no sheep on it. If this is found to be true, or only half true (and of this latter I have no doubt), there is seen at a glance the advantage of keeping sheep.

But let us come to some of the actual facts that can be or are realized by men who are keeping small flocks of what we call mutton sheep. Take my own case. I have a flock, all told, now, of about 100 cross-bred Lincolnshire and Oxford Downs.

My April lambs will average to-day not less than 110 pounds. This with no grain as yet. Lat me feed those lambs until early shearing and then give them to the butcher. They will shear me an average of twelve pounds of wool worth \$250. The body will weigh by that time 140 pounds, and sell for not less than \$4, making \$8. I am not speaking at random at all. Look at the market reports for a year back. Then, again, I have often sold to our town butcher, who has come to the farm after them in the scarce time for butchers' stock, between hay and grass in the spring, 2 and 3-year-old wethers and bucks, one and two at a time-often I had sheared from ten to fifteen pounds of wool from them (and he waited for me to do it)-for 5 cents a pound, they weighing usually 200 pounds, bringing me the good sum of \$10, besides the wool. Of course, there are "improved" breeds of sheep. They are none of your long-legged, barebellied scrubs, shearing three to four pounds, and weighing ten pounds to the quarter. We are breeders of improved stock, and this is the kind of stock we are talking about and urging the general farmer to keep. But I must hasten to the end. The dog and wolf question will come in in the discussion. We must have a State bounty on all wolves; that will annihilate them. Let the Committee on Resolutions bring in a strong one on this. Before we meet again another Legislature will have been elected. Let us keep all who are not with us on this sheep, dog and wolf question at home.

A Dream of Fair Women.

Tennyson in his exquisite poem, dreams of a long procession of lovely women of ages past. This is all very well, but the laureate would have done the world a greater service if he had only told the women of the present how they could improve their health and enhance their charms. This he might easily have done by recommending the use of Dr. Pierce's Favorite Prescription. Health is the best friend of beauty, and the innumerable ills to which women are peculiarly subject, its worst enemies. Long experience has proven that the health of womankind and the "Favorite Prescription" walk hand in hand, and are inseparable. It is the only medicine for women, sold by druggists, one additional wire will cost, putting up under a positive guarantee from the manuand all, say \$25. Now, the satisfaction facturers, that it will give satisfaction in every case, or money will be refunded. This guarantee has been printed on the bottle-wrapper, and faithfully carried out for many years.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. Bowman & Co., Jones Building, 116 West Sixth street,

In the Dairy.

Farm Butter and Its Market.

J. M. Jamison, in the Farmers' Review, shows up the true condition of things in this way:

It is hardly possible to describe it, its various ways of manufacture, and all that enters into it from the feed bin to the churn, from the churn to the country store. We are told by the country merchants that about one-half they buy is No. 1. The majority of them say this; some do not pass more than one-third of it as first-class. Firstclass is understood by them to mean such as is rapidly sold to and sought after by their customers. What passes for second-class includes all from passable down to that they will not buy at all, and there is very little that comes to their counters that they will not buy. The custom of buying all that is offered has gained such firm hold that they are almost compelled to buy all. If their customers are good, they fear to turn them away by refusing to buy the poor quality of butter they offer in exchange for goods. The worst feature about this trade is that it is all bought at the same price. It would be much better for all parties if it were graded and priced according to quality. The way it now is, the careful housewife has no greater incentive to make a choice article than to maintain a reputation. The careless one is satisfied as it is, for she receives the same price as the most careful. The store-keepers will tell us that it would be a very hard matter to buy it according to quality, for some of their customers that think they make the first quility make the poorest, and persons that are very intelligent in probably all other matters relating to the farm. There is one consolation to the consumer of this inferior producta little of it at a high price goes a long way. It is even possible to have different grades on the table at the same time that can be sampled, using the most pleasant to the taste, locating its place on the butter dish by its color, in case the taste requires a second helping. At this time of the year the butter case of the county store presents a wonderful variation of colors, from the richest yellow-too rich to be naturalto the palest white, causing the mind of the beholder to run in the direction of lard and its compounds. We do not see much hope for reward to the diligent and painstaking farmers' wives as long as they must sell their butter at the small country villages. Sometimes one more enterprising than her neighbors will seek a better market than the stores, selling her butter to private families at a stipulated yearly price. But this demand is so limited in small villages that it is easily met, holding out no inducement to the indifferent that would take some interest in the matter, were the demand such as to bring it constanly to their notice. There would be more persons willing to contract for butter by the year if they could feel certain that they would always get it. On the ordinary farm it is an undertaking to furnish a stipulated amount each week to the special trade. The heat of summer, base of the separator. This company the undertaking; the cold of winter, without a milk room and without proper feed and shelter for the cows, together with having to milk standing in the mud, discourages the farmer's wife with such an undertaking. These drawbacks, found on too many farms, have much to do with making the country butter and its market what they are. As it stands, there is but tank into a steel cylinder, which is belittle inducement to make a first-class ing run at from 6,000 to 7,000 revolutions

article or to work up a regular trade. The supply of milk on most farms is very irregular, which of itself probibits a regular quantity of butter, but this is not so much the case as formerly, for we notice that the butter demand is well met at the country stores at most all seasons. Yet the irregular supply of milk prevents the farmer's wife from making contracts for regular delivery. She prefers to market the surplus at the price it will command, which is usually a poor one; the best of the market 18 not for the transient attendants.

Greamery Outfit .- Centrifugal Separator. Upon the question of creamery for 100 cows, and butter-making by means of separators, a writer in American Breeder advises that a centrifuge be put in, as a great labor-savor. He says:

Steam can be started when milking is commenced. As fast as the milk is drawn it may be brought to the dairy and it will be at just about the right temperature for separation, though this may be done at any time before the milk sours. Eight degrees is about the right temperature at which to separate the milk. At the time of separation, the sweet skim-milk will be at just the right temperature to feed; no warming will be required. Cost of an outfit: Separator, \$190; one two-horse power engine and boiler, \$150. Other items same as for cold-setting process.

If the cold-setting process is to be used, fifty or one hundred cans eight inches in diameter and twenty inches deep would be necessary, or Cooley cans can be used. These are patented, and completely submerged in water. A tank should be made water-tight, large enough to hold the cans. It should set so that it may be conveniently filled and emptied. If plenty of ice is used, the milk need set but twelve hours, but if not kept at about 44 deg. to 50 deg., milk should set twenty-four hours.

The centrifuge will extract all the cream, and in a large dairy it will prove economical.

If cold-setting is used, and no engine, a horse-power will be needed for churning. It is not advised to use a churn smaller than 150 to 200 gallons; two fifty-gallon cream-tempering vats and a butter-worker will be needed.

The above list, together with buttermilk strainer, dairy thermometer, pails, dipper, butter packer, ladles, glass graduate, scales, and perhaps a few more minor items, will form a firstclass outfit for a large dairy or small creamery making about 100 pounds of butter per day.

The centrifugal process of buttermaking, including a description of the

machinery used, is as follows: The process of butter-making is practically the same as by any other system; the word "centrifugal" relates to the extraction of the cream by a machine called the centifuge. There are three leading makes of machines, namely, the De Laval, Danish-Weston. and Backstrom, ranging in price from \$190 to \$500. These all run by power; steam power is the only one that has which requires no engine, the steam being introduced into a drum at the without ice or spring house, is against also makes two styles of hand separators; cost \$150 and \$225. These have an alleged capacity of 300 pounds of milk per hour. The writer, after a few moments trial, was perfectly willing some one else should turn the crank. Power machines separate from 700 to 1,000 pounds of milk per hour.

The milk, which should be at a temperature of 80 deg., flows from a

per minute. The cream, being lighter than the milk, is, by its natural gravity, thrown to the top and central portion of the cylinder, from which it flows away in a constant stream. Through another small pipe the skim-milk is carried away. The work of the machine is constant—that is, the milk is continually flowing in, and cream and skim-milk carried away continually. The cream should at once be cooled by submerging cans in water; after which its treatment does not differ from the usual process, the cream being ripened and churned in the same manner. Care should be taken to stir frequently. The quality of the butter is about the same as by the best process of coldsetting. The system is not advised for less than seventy-five or one hundred cows. The fancy dairy trade in New York city demands cream made by this process. By a small thumb-screw the thickness of the cream can be regulated. -Farm, Field and Stockman.

Americans as Cheese-Eaters.

I went into a retail store the other day in a small villiage situated in the very center of New York's dairy region and asked the urbane proprietor if he had any good cheese. "Yes, we have some that is excellent," was the reply. "What is the price per pound?" Fifteen cents." "Fifteen cents! Great Scott man isn't that pretty high, it's like paying a nickle apiece for Florida oranges in Jacksonville." "Can't help it, sir, full stock cheese costs me 121 cents per pound in Utica, and the price I ask barely gives me a profit. I have some cheaper cheese here that may suit you." He pulled the cover from a white-livered, flattest of the flat skims and shaved me off a sample from its horny sides. I gingerly nibbled it; it was as tasteless as hotel coffee, and tough as restaurant-served beef. "How much?" I quavered in a despairing whisper. "Ten cents for sixteen ounces," came in cold-hard-cash tones from the lips of the unsympathetic man of trade. I went out in weakness of spirit and gazed nonchalantly on the landscape. The little village lay environed by colossal hills that were already poking their brown noses through the pall of March snow. Well-traveled highways radiated in every direction and at appropriate distances along their length stood great commodious white farm houses and mammoth red barns, that sheltered in their basements the animals that in summer made the land flow with milk, if not with honey. These industrious and well-to-do farmers here produce the cheese that surfeits the New York market. Nine-tenths of their labor is bestowed on milk production; investing in and caring for milch stock, giving up large areas for pastures and meadows, and harvesting the summer's immense hay crop. Thus the ceaseless round of toil and expenditure goes on to the end that people in another hemisphere may be supplied with a nutritious food that the dairy farmers, as a general thing, been found practicable. The De Laval deny to themselves. What farmer is company makes a turbine machine there who producing twenty firkins of butter, 1,000 head of cabbage, or a hundred bushels of potatoes, will lai to reserve a sufficient allowance for his family's use when turning the produce off for cash? But I will admit that this cheese-consumption question is a little different. A generation ago, every housewife made a few cheeses in a crude manner, and of a crude, though probably wholesome quality. As a general thing, these were made to be consigned to the family larder, and eaten on the table as freely as butter. Then cheese had but little value. Herkimer county had not yet established

Wells, Richardson & Co's **IMPROVED** utter olor. STRENGTH PURITY BRIGHTNESS EXCELS IN

Always gives a bright natural color, never turns rancid. Will not color the Buttermilk. Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's Improved Butter Color. Three sizes, asc. soc. 8 to Best States. WELLS, RICHARDSON & CO. Burlington, Vt.

its trade with England, and there was no market, and no demand for the product. When the change did come just prior to the civil war, cheese suddenly became of more proportionate value than butter. England wanted the goods; they just suited the British appetite, for they were similar in quality to the cheddar cheese of Somersetshire, and both were infiritely superior to anything that had hither been thrown on the market. Cheese immediately became too dear for dairy farmers to eat, and townspeople followed their example. Every one considered it economy to abstain from its use, and for pecuniary reasons alone cheese lost caste on the American table. Self-imposed deprivation soon generated an indifference for it, and, nationally speaksng, we have now got to cultivate a taste for it linstead of satiating a natural one. A universal cheese appetite has got to come some time to this country. As dairying expands, the markets of Europe can no longer absorb the combined yield, and the surplus will be left on our own hands to be in some way disposed of. Of course in the event of such a dilemma the people have got to go to work and eat it up. There is no other alternative. This will cheapen the product, and the consumers millenium will be at hand. While farmers are waiting for this state of affairs to materialize wisdom will make itself manifest in them, if they every year purchase one or two good September cheeses and leave them on the factory shelves till cured. Then put them into the larder, just as a crock of butter would be laid away, and consider one as essential for a full-laid table as the other. There is no use in discussing here the merits of cheese as an article of diet. Every one knows its nutritive value and salutary digestive effect. It's a poor time to start a reform, however, in the face of 15 cents per pound, but such facts ought to open people's 198 so that they will lay in a half yearst supply when the product is cheap. a man wants good cheese (and they do), it will not do to depend on t do), it will not do to depend on the corner grocery for it; buy in bulk and know what you are buying. Then, when you have got the best to be had, eat it daily, feeling that it is one of the necessities and not one of luxuries of dist.—Geometric Named diet .- George E. Newell, in American

RALEIGH, N. C., February 20, 1888. DR A. T. SHALLENBERGER, Rochester, Pa.-Dear Sir: I wish to say a word in behalf of your wonderful Chill and Fever Pills. Some months ago a friend, who knew that my wife had been afflicted for months, that my wife had been afflicted for months, sent me a package of your pills. I gave them to her and they cured her at once. A neighbor, Mr. Perry, had suffered with chills for more than a year, and had taken Quinine until his hearing was greatly injured. Seeing the cure wrought in my wife's case, he procured a bottle of pills and was speedily restored to perfect health. I feel that this is due to you.

Very truly,

REV. J. D. DAVIS.

Correspondence.

The Twine Trust.

EDITOR KANSAS FARMER:-Allow me through the columns of your paper to sound a note of warning to the farmers of the West, and Alliance men in particular. Beyond any doubt the most determined effort is being made to rob the farmers by reason of the combination known as the "twine trust" I need not stop to give the different opinions in regard to its origin. Political demagegues are also seeking to divide us on a question on which the issue was made last fall. This is not a question of politics, but of business, and must be met as such. The same amoun of tariff has been heretofore collected that is now, so that be the tariff right or wrong, it can not be said that it is the cause of the advance in the price of twine.

I have just received a copy of a paper called the Sunday Courter, published in New York, and its entire mission seems to be to convince the Western farmer that he is the veriest "chump" on earth when he supses that the twine manufacturers are anything but saints and that they are simply giving their time and money for our benefit. This Sabbath day journal actually quotes one manufacturer as saying that he is selling twine to the farmers for 1 to 2 cents per pound less than the raw material costs. Such magnanimity is truly astonishing. Another gentlemen says that some of us ought to go to Yucatan and raise sisal so the cordage company could get their raw material cheaper. Another article is devoted to a humorous allusion to the Farmers' Alliance and how the granger is so easily scared, and various "hits" at rural greenness. The West has doubtless been deluged with this so-called agricultural journal, and I wish that every farmer could see a copy.

Alliance men, do your duty. Keep steady all along the line. Meet and confer together often. In multitude of counsel is wisdom. Watch the papers for a report of the Cowley County Alliance. One portion of the county raises more wheat than corn, and the other more corn than wheat. The wheat-raisers pledged themselves not to use corn at an exorbitant price. The corn-raisers pledged themselves to assist their brothers who raise wheat with all machinery at their command and by every device to assist in saving the harvest by other means than using twine. Self-binders can easily be changed to handbinders, and there are thousands of drop machines still in the country, and they are much cheaper to buy than twine binders and are good mowers as well. Look on the bright side, brother farmers, and act with judgment and determination.

The infamous sheet to which I have referred tries to show that we can not afford to refuse the twine on account of the machinery that would have to stand idle. But we must do so unless we are treated right. Buy no twine binders. Investigate the Bovee system of harvesting without twine. it may be just the thing. Brother C. A. Fyler, State Business Agent of the Farmers' Alliance and Co-operative Union, can give nformation about it. Address him at Burron, Kas. The only way to meet a combiation is by standing together against it. The question is—Shall honest industry pay ribute to organized greed? Are you ready B. H. CLOVER, T the question?

'res. Farmers' State Alliance and Co-opive Union of America. mbridge, Cowley Co., Kas.

isas Butter and Cheese Manufacturers' Association.

EDITOR KANSAS FARMER:-There was a ood attendance of delegates at the meeting the Kansas Butter and Cheese Manufaction, at the Roar poms in Salina on the 10th inst., also at an bjourned meeting held in the evening in ie parlors of the National hotel. Very inresting and instructive addresses were devered by A. Curtis, President of the ssociation; Col. T. D. Curtis, of Chicago, idge Wm. B. Sutton, President of the ussell Creamery Association. Capt. A. C. erce, of Junction City, told us all about os and ensilage, giving full details for the nstruction of silos so cheaply as to be thin reach of almost any farmer; also w to manage while cutting and storing the and just see how easy it is to fool a late dry It is said that there are 650 creameries in the Depot,

crop of corn in the silo. The Captain spoke from experience as well as observation, and his estimates of the value of a crop of corn thus stored and used are well worthy the careful study of the earnest seeker after the correct policy, either for feeding dairy cows or beef steers. Mr. J. E. Nissley, of the Belle Springs creamery, read a very interesting paper on "Creamery Management," for which he received a vote of thanks, coupled with a request that the same be published. The evening session was devoted to the preparation of a program for the next meeting, which will be held in Junction City on the 16th of October, 1889.

J. M. ANDERSON, Secretary. Salina, Kas., April 15.

Experience With Ninety-Day Corn.

EDITOR KANSAS FARMER:-Perhaps it will interest some of your readers to know my last season's experience with ninety-day corn. I plowed the ground in the latter part of April and commenced to plant the 2d day of May, with a "Farmer Friend" check row planter. I planted two bushels of improved Leaming corn first, then one bushel of calico corn (don't know the name of the calico corn), then planted one-half bushel of Pride of the North corn, all claimed to be ninetyday varieties. I then followed up with planting the large late varieties of corn, part on plowed ground and part I put in with a Star lister on unplowed ground. I also planted twenty-four acres of ground with St. Charles white corn, planted the latter with the lister. I then harrowed all this corn ground with a light harrow; the plowed ground I harrowed before the corn was up, and the listed corn ground after the corn was well up. I then cultivated all except sixteen acres of late large variety of common corn (which was put in by lister) three times, the last time slightly ridging the dirt up to the rows.

All of my check-rowed corn was a perfect stand, from two to four stalks to the bill. Listed corn, also, a good stand, except on the twenty-four acre patch of St. Charles white, which the moles thinned some, but not to amount to much. The results were as follows: Leaming ninety-day corn yielded fifty-five bushels to the acre; calico corn, fifty-five bushels; Pride of the North, fortyfive bushels; St. Charles, forty bushels or a little over; common late cern, about fifty bushels. This was on first-class Kansas river bottom land. I am satisfied that the listed corn was no better than the corn put in with the planter. Neither was the corn any better that was cultivated three times than that which was only cultivated twice.

My experience and observation with listed corn has not been as satisfactory to me as some people try to make out or claim for listed corn. I generally find that my checked corn yields from five to fifteen bushels per acre more than that in the same field planted with the lister. Last year was an exception (1887 I mean), when my checked corn had practically no corn on it, and in a field of thirty acres put in with a lister I had one corner of the field, about eight or ten acres, which yielded 250 bushels; the balance we did not try to husk as there was no corn on it. But I consider the lister a great labor saver, and it enables you to plant more ground. I intend to continue to plant about one-half of my corn with the lister, and the part I list one year to plow and plant with check-rower the next season. I also intend to plant about one-half of my entire crop of improved Leaming corn and some calico corn, and the balance of late varieties. The Leaming corn was glazed and practically out of danger from drought by August 1st. It is a medium large ear, from one to four ears on a stalk, a fair-sized stalk, a good size to cut up for fodder and an easy corn to husk. My calico corn is from a week to ten days later. The St. Charles corn I am rough with, and the Pride of the North is all right for a small patch to come in early for feed, but is too hard to husk for a general crop. The Leaming is my favorite, on account of its fine yielding qualities and having its crop made when late corn is yet in the silk. I think it ought to be planted airy editor of the Prairie Farmer, and by April 20 if the weather will permit and on plowed ground, as some that was listed here was not nearly as good as mine which was checked. I find it difficult to get a good stand with a lister if planted early, as early as April 20. I would advise every farmer to plant a small piece of early corn this year

spell (as we usually have in Kansas) and get a fair crop before it sets in.

St. Marys, Kas. ANDREW BELL.

Farmers' Alliance Notes.

The Farmers' Mutual Benefit Association is another growing farmers' organization in Kansas. In Coffey county nearly every township is organized. The organization is secret, and has township, county, State and national organization.

Lincoln Beacon: A Farmers' Alliance has been organized at Herman, with G. T. Ashton as President and Mr. Herron as Secretary. We wish that an Alliance could be organized and kept in running order in every township. Barbed wire, binding twine and other articles for farm use could then be bought cheaper than now. The experience of the Alliance in other parts of the State indicate that the trusts and combines stand in considerably more fear of this organization than they do of State Legislatures and anti-trust conventions.

Never before was there such a general uprising of the farmers all over the country nor such perfect unanimity as there is at the present time regarding the binder twine trust. Farmers everywhere have decided not to use twine unless they can secure it at reasonable prices. The robber price won't be tolerated. It is very gratifying to see such a general awakening among farmers and it is resulting in organization everywhere. Let the good work of organization go on. There are many equally important issues which can only be met by organization.

There is essentially no difference between the Northern and Southern wings of the Farmers' Alliance, which is growing so rapidly with their respective organizations. Their objects are identical, and it is only a matter of time when they will both merge into one grand organization. We have so many requests for the names of the State officers that we again give the name and address of each of the State Secretaries. T. J. McLain, Peabody, Marion county, is Secretary of the Northern Branch, and J. B French, Burrton, Harvey county, is State Secretary of the Southern Branch. They are both excellent men, representing growing and worty organizations for farmers.

Gossip About Stock.

Hon. H. M. Vaile, of Independence, Mo., claims May 29 as the date for his next public ale of Bates Short-horns.

T. P. Babst, Dover, Kas., has purchased of Powell Bros., Springboro, Pa., four Shetland ponies, one fine stallion and four mares

The total assets of the American Shorthorn Breeders' Association, as shown by the Secretary's last report, amounts to the neat sum of \$42,419.99.

Breeders of Aberdeen-Angus cattle surely will find it a decided advantage to attend the dispersion sale at Dexter Park, Chicago, on April 23 and 24. Send for catalogue to G. & J. Geary, Brookfield, Mo.

We are in receipt of the annual catalogue of richly-bred trotting horses, imported cobs and fine thoroughbreds of the Oriole stock farm, owned by C. H. Andrews and J. A. Logan, Jr., Youngstown, Ohio.

During the last two years our veteran friend, James E Smith, Minneapolis, Kas., has dehorned 2,965 head of cattle and never lost a single animal. He reports that every farmer who has ever tried it is an enthusiast on the subject.

T. P. Babst, breeder of Short-horns at Dover, Shawnee Co., Kas., reports that he has received, as a result of advertising in the FARMER, over 200 inquiries, and at present finds a good demand for females. Recent sales of bulls were made to J. H. Bitts and E. Allen, Williamsburg; John Smith, Mark St. John, Dover, and Carey Snyder, Topeka.

General L. F. Ross, of lowa City, Iowa, importer and breeder of Red Polled cattle and President of the Red Polled Cattle Club of the United States, has just purchased a carload of pure-blood English Red Polled bulls, bred by Hon. Ira S. Hazeltine and L. K. Hazeltine, Dorchester, Greene Co., Mo. General Ross appears to be satisfied that American breeders can equal the very best importations from England. Some of these young bulls were exhibited at St. Louis and Kansas City fairs, and were never beaten.

State of Iowa; hence the great demand for the large size English Red Polled cattle.

Breeders will be interested in the pedigree of the prodigy mentioned in the following item from the Lincoln Beacon: Hereford-Durham seems to be a good combination for producing an extra heavy weight of calves. E. B. Bishop, of this place, has a bull calf of the above pedigree which weighed last week on the day he was 3 menths old, 395 pounds. He is an unusually handsome and intelligent brute.

Publishers' Paragraphs.

W. B. Conkey, general book manufacturer, has our thanks for one of the most perfect mail-openers it was ever our privi-

Only a limited number of copies of Swann's \$1 book, "The Future by the Past," are now on hand. We supply the book and the Kansas Farmer one year for \$1 50.

Our list of agricultural books as well as our club list of papers are valuable offers, and subscribers needing other papers or books will find that we offer our customers

We especially commend our liberal offer of free premiums to every one of our readers. See announcement in another column. We will also mail our little 25 cent book, 'Peffer's Tariff Manual," to any one sending us one new subscriber and \$1.

Darling & Douglass, Topeka, manufacturers of rubber stamps, seals, etc., as well as fine job printers, advertise this week a pocket stamp that also contains pen and pencil, which they offer to sell to our readers for 25 cents. It is well worth the money.

The Emporia Zeitung is the first German publication in Lyon county, and has a good circulation outside of that county. Parties desiring a good paper printed in that language can secure it through this office in connection with our journal for 25 cents per

A recent ruling of the Treasury Department decides that Wells, Richardson & Co.'s improved butter color is not subject to internal revenue tax, because it contains no foreign fat, either animal or vegetable. Our advertisers naturally feel pleased with this

One of these pleasant occurrences which we are always pleased to notice, occurred at the hay press works of Geo. Ertel & Co., Quincy, Iil., when Mr. Geo. Ertel was presented by his employes with a handsome gold-headed cane, suitably engraved, as a gentle reminder that it was his 59th birthday. The local press were represented, and with a pardonable degree of pride were shewn by Mr. Ertel through his new works, which have recently been completed, and which are the largest exclusive hay press works in the United States.

Poems of the Plains.

BY THOMAS BROWER PEACOCK, OF TOPEKA.

The retail price of this gilt-edge volume is \$2.50. Contains 330 pages, has a fine engraving of the author, is in the third edition, and is being translated into the German language. This book includes the famous "Rhyme of the Border War," an historical poem of the Kansas Missouri guerrilla war, which the Chicage Inter Ocean says "is a poem of great strength and one of the best war poems ever written."

Mr. Peacock, as is well known, is the most noted poet in Kansas, and his works have attracted the attention of foreign as well as home critics.—Capital, Topeka.

For a limited time, to introduce the book, we offer the "Poems of the Plains" and the KANSAS FARMER one year, both for only \$2. KANSAS FARMER Co., Topeka, Kas. Address

Excursion to New York City.

For the Centennial Celebration-Ins ration of President Washington-on the 29.h and 30th of April, tickets to New York and return will be on sale at low excursion rates; about one fare for round trip-at offices of the Ohio & Mississippi Railway in St. Louis, and at offices of connecting lines west via the O. & M. A choice of four routes is offered by the O. & M. Ry. from St. Louis.

Tickets on sale in St. Louis April 27th and

28th, good leaving New York for return until May 6th, inclusive.

For tickets via this line and further information call on nearest local agent. St. Louis offices 101 and 103 N. Fourth St. and Union Deport.

BUSINESS.

Essay read before the Kendall Debating and Improvement Society, March 13, 1889, by H. A. W. Corfield.

Business is a wide term, comprehending nearly every avocation man is engaged in. A man's business is his occupation. Commercially, it is applied to all men engaged in supplying the wants of their fellow-men. This essay is not intended to supply any technical knowledge of any particular business; my obj et is rather to demonstrate the importance of certain qualities which constitute the character of the true business man, enabling him if not to succeed, to aveid failure. Study and observation will convince you that all natural operations are based on a strict, although at times seemingly stern justness. "As we sow we shall reap," no matter what our business or profession, alike in commerce, literature or politics; we attain to that position which natural espacity, our own industry, and wise use of the talents entrusted to us entitle us to.

What, then, is the spirit of the age in which we now live, commercially? I say at no former time was the necessity so great in all trades, of the business man thoroughly understanding the theory of business generally and being master of the practical details of the one he is engaged in, of being able to take good, broad, general views, able to understand the needs of the times and adapt his system thereto, with judgment and tact introducing any improvement or just concession promptly and freely that may be required. You must not only have the ability to supply your customers as favorably as any other, but let the world know it, and by your conduct impart the assurance to them that you are to be relied on. Value your reputation as a pearl beyond price; never misrepresent or deviate in price; treat all equitably and alike. To succeed in these times it is essential you should look on both sides of a question. There is no safe or permanent bargaining without. The very first quality in all successful negotiations of any class, or engaged in any kind of transaction, is a reputation for fairness and honesty. It is an age of fierce competition, an age when you must not expect business to come after you unless you act in such a way as to induce it, an age wherein nothing succeeds without labor. There are no gains without pains, and rightly so; but practice makes all things easy, and attention and time, with earnestness, will make us proficient or perfeet in all things.

Remember to bear is to conquer our fate He who never despairs seldom completely fails. "Faint heart never won fair lady." Success in life has been compared to a beautiful woman whom it is only the earnest, sincere wooer has a chance of winning. You must in many cases compel her kindness. Dally with her, be hesitating and uncertain, she will certainly jilt you.

Thackeray says, "You must tread on other people's toes, or they will tread on yours." So it is in life. You must push your way or others will push you aside. Still, spite of all difficulties, it is one of the glories of our day and country that a man, by taking proper means and in good time, may make his way in life before he is half a century old, and so may have a chance of enjoying his own success.

The twelve qualities absolutely necessary for business men more or less if they wish to succeed are health, education, observation, industry, perseverance, arrangement, punctuality, calculation, prudence, tact, truthfulness and integrity.

Health.-Good health is best achieved by early rising, regularity in going to bed, living sparingly, getting all the fresh air that we can by hunting jack-rabbits, skating, sleighing, or anything of that kind. Oxygen is the natural tonic and stimulant. should as thoroughly as we are able be selfgetting and keeping that precious boongood health.

"Better to hunt the fields for health unbought, Than fee the doctor for a noxious draught."

develops; it does not, cannot create. We impossible to over-rate the importance of are what we are by force of nature. We are born in surrounding circumstances and not business, and there can be no method withthrough education. Education refines, mod- out punctuality. ifies, improves natural faculties and renders us more or less useful. By physiology we could all be taught how to train the body to well directed diligence." Calculation and beauty; how to train the intellectual

and moral nature; how to form habits, which is the master power of education. Observation and experience are our safest guides, and the time has come for a determined struggle by all enlightened men against any and every kind of intolerance, and to employ the many and various modes of leverage now in our possession to raise our lives to a higher level. Civilization is nothing but the knowledge and observance of natural laws.

Industry.-"To labor, and to be content with that a man hath is a sweet life."-Ec clesiasticus.

He that by the plow must thrive,
Himself must either hold or drive.
—Franklin.

Garibaldi told the workingmen of Rome in 1875 the title of "workingman" should be considered more honorable than any other, not alone for satisfying the ambition of raising one's self to a higher grade of society, but for the spirit of true independence only the industrious workingman can really possess. Be up early so as never to get behind with what you have to do. Repeated exercise of the will in this way will soon form an invaluable habit of industry.

Perseverance.

Plow deep while sluggards sleep
And you shall have corn to sell and to keep.

—Franklin.

Perseverance is twin sister of industry and means the unflinching pursuit and steady execution of the plan of life determined upon. There is hardly an employment in life so trifling that will not afford a subsistence if constantly and faithfully followed. So be in earnest. Never despair. Perseverance will overcome all difficulties. You must try, and try again. Perseverance is as well or better than natural talent; the one may not bring success, the other must. Never lose heart, no matter how heavy the trouble is, domestic or otherwise; excessive sadness cannot help any one. You may be depressed at times, almost beat, but you need never lose your manhood over any trial.

Arrangement.—Having started a business. your arrangement should be such as will insure the fullest development of the trade under your management within the limits of your capital and power. Every effort should be made to foster and develop the utmost without running the risk of failure; in fact. von should put on all the sail your vessel will carry without danger of being blown over. In arranging your scale of profits, it is wise to be guided by those who have preceded you in your own or similar business until the first year's balance sheet shows you the rate of profit necessary to cover the expenses of carrying on your business. You cannot be too vigilant whilst in business. You should make every effort to get the support of as wide a range of customers as your position or trade admits of. As a rule those businesses are most likely to thrive that dive deepest into the mass of the community or adapt their arrangement to supply and meet the wants of the greatest number.

Punctuality.-"Early to bed, and early to rise, makes a man healthy, wealthy and wise." This quality is the very hinge of business, and will inevitably be produced by industry, perseverance and arrangement. A punctual man respects his word and has regard for other people's convenience. He knows delays are dangerous, and he never defers till to-morrow what should be done to-day. Delay only complicates matters and doubles the difficulty. Now is the wise man's axiom, and presently the fool's motto. The longer you delay, the more you dislike a bad job. An unpunctual man interferes with our plans, wastes our time, causes uneasy feelings, and seems to tell us we are not of sufficient importance in his estimation for him to be punctual; but the fault generally arises from want of system, defective calculation, or imprudence in making promises. A punctual man will invariably keep his engagements and fulfil his promises. helpful and self-reliant, and be rewarded by Time is money. Therefore call upon a man of business in the hours of business affairs of business only; transact your business and go about your business, that he Education and Observation. — Education may have time to finish his business. It is punctuality. Method is the very essence of

> Calculation.—It has been said and may be accepted as a truism that "Nothing is denied

be brought into active service. There is such a thing as idle and worthless diligence; when a person does a thing wrong which a little thought would have enabled him to do right, and he does the same thing over again, then he has been idly diligent. Diligence without calculation and thought is weak: diligence with thought and calculation is strong and achieves success.

Prudence.-Prudence may be defined as wisdom applied to practice, and the possession of it will only allow his trade to increase in proportion te his capital. If the trade increases too fast prudence will reduce it within the limits the capital justifies. More persons fall from doing too much than too little. We must learn and be strong enough to walk before we can run. Practical men base their hopes upon past experience and present influence, because as surely as the seasons govern the harvest, just so surely do natural causes govern the fluctustions of trade. Past experience teaches sensible men not to be sanguine, but to look to the state of the country where their products are sold, and base their calculations upon the state of affairs existing in the different localities. Prudence is essential to success

Tact.—Tact is indispensable to every leader. I may say it is impossible to manage a business without it. It is that nice diplomatic art which enables one without deception or hypocrisy to be seemingly the same to all men, yet varying with each according to his peculiarity and according to the mind of the man at the time, ready to see and seize any opportunity that offers to forward the end in view in every transac-

Truthfulness.—Truthfulness is one of the finest gems in the business character; the getting a name for being truthful is invaluable. It produces a frank, manly, open, look-you-in-the-face bearing which begets confidence in the buyer who once believes you and has faith in your judgment and integrity will never withdraw his support from you.

Integrity. - Integrity is twin sister to truthfulness. As a rule, if honest you will be truthful, and vice versa. Without integrity ability is valueless Honesty is the best policy. Integrity is to business what courage is to the soldier, zeal to the advocate, or impartiality to the judge.

Inquiries Answered.

APPROPRIATIONS.—Did the Legislature pass the bill appropriating \$36,000 for G.A.R. reunion buildings at Ellsworth?

−No.

JOHNSON GRASS.—Have any of your readers had experience with Johnson grass? In Peter Henderson's catalogue 1 see it is called a sorghum. Where can seed be had?

-Experience of Kansas farmers with Johnson grass has not been satisfactory. It grows well, but does not stand our winters. Seed may be had of any of our seed advertisers.

SALT—I desire to ask through the col-umus of the FARMER, some person's exper-tence or knowledge of salt as a fertilizer. What advantage, if any, to growing crops? When to sow, and what quantity per acre,

-Look up your files of the Kansas FARMER. Only a few weeks ago we had several articles on that subject, all one week. Three hundred pounds of salt sown broadcast on an acre of wheat about this time is believed to be good.

INTEREST —Do you think that the Republican party has kept its pledge, made to the people in its platform, to reduce the rates of interest? The bankers here say that the law passed by the Legislature will not affect them in the least.

-Yes; we think the pledge was kept; but we think that a large majority of members of the Legislature were hoodwinked and saw "through a glass darkly." We exposed the trick at the time. Of course bankers are not hurt; it was not intended that they should be.

TANNING fur or hair on, here are two recipes which we published two years ago. They are copied from Shoe and Leather Reporter: "Take two parts each of alum and salt, and one of saltpeter, all well pulverized. Clear the skin of fatty matter. Sprinkle it white with the mixture. Fold in edges and roll up; let remain four days, then wash with clean water, and then wash with soap and water. Pull the skin when drying to make not only to health and strength, but to grace proves to us that before diligence can be it soft. Another recipe:--Lay the wet skin well directed the powers of the mind must on a smooth slab or a hard board; scrape

with a dull knife until all loose flesh and film is removed; then wash off in soft water. Take a glass or stone jar, put in an ounce of oil of vitriol and a gallon of rain or river water. Let it steep in this for about half an hour. Take it out, work it with the hands until dry, when it will be pliable and soft, The more worked the softer. Use no grease.

Weather-Orop Bulletin

of the Kansas Weather Service, in co-operation with the United States Signal Service, for the week ending Saturday, April 13, 1889:

Precipitation.-In the extreme southeastern counties the rainfall has been slightly below the normal; over the rest of the State there has been an excess. This excess is greatest in the counties south of the Arkansas river, and extending north through Pawnee, Barton and Rush, thence northwest, covering the northwest quarter of the State. Considering the amount, the manner of falling, and the condition it put the ground in, this is reported as the best rain within a year in the central and northwest counties. In the west the buffalo wallows are full of

Temperature and Sunshine.—The temperature has ranged about the normal while the week has been pre-eminently cloudy.

Results.—The weather this week has been exceedingly favorable to wheat, rye, oats, grass, corn, fruit, forest and ornamental trees, and to the berries. The wheat fields have passed the "green carpet" stage, the wheat being too tall, and is generally reported from 10 to 25 per cent. above the average. The green oat fields are reported in every direction and are showing a much better ratio than last week. The north-central counties report wheat, rye and oats as never looking better. Stock are now on pasture. Corn is being planted in every county. The early corn is up as far north as in Mitchell, the counties in the middle being generally ahead of those in the eastern division in this respect. Peach and plum trees have bee full of bloom in nearly all sections, and cherries are beginning to bloom in the centrai and northern counties. No chinch bugs reported this week. T. B. JENNINGS,

Signal Corps, Assistant Director.

Topeka Weather Report. For week ending Saturday, April 13, 1889:

		Thermometer.		
Date.		Min.	Rainfall.	
April 7	68	38		
** 8	57	48	83	
" 9	60 .	46	4	
" 10	63	87		
" 11	77	52		
" 12	84	50	Trace	
" 13	61	42	02	

BEST EVERGREENS FOR KANSAS. See Tincher's cedar ad. in two-cent column.

Patents.

The following list is reported through the official records for the week ending April 9, 1889, by Higdon & Higdon, Patent Lawyers, office rooms 55 and 56 Hall Building, Kansas City, Mo., and room 29 St. Cloud Building, Washington, D. C. By applying to them at either office a printed copy of any patent here named can be obtained for 25 cents.

MISSOURI.

MISSOURI.

Feed regulator for roller mills—Joseph
W. Wilson, Breokville.
Automatic grain - weighing machine —
Henry H. Boenker, St. Charles.
Igniting apparatus for gas engines—Lewis
C. Parker, Kansas City.
Frames for building blocks or paving tiles
—Benjamin W. Bolden, St. Louis.
Paving block—Robert B. Berrie, Lexington.

ton. R verse link for steam engines—Snyder & Deets, Agency.

Sponge cup and sealer-James C. Parker, Woodston. Car coupling—Joel L. Monasmith, For-

Baling press - William H. fil y, Osage Mission Cultivator for listed corn—Harlin B. King,

Presto! Change! Gray and faded made to assume their original color by applying Buckingham's Dye for the Whiskers. It never fails to satisfy.

NEW ADVERTISEMENTS.

Brosius, N. H	Early seed carn.
Babcock, M. S	Holstein bull calves.
Casey, Jno	Seed potatoes.
Darling & Douglass	25c Pocket Stamp.
F C Anatin Mfo C	n Well Drilla
Fowler, Geo	Public sale of cattle.
Pioneer Buggy Co	Buogies.
Pyles, Wm. D	Farm for sale.
Talbott, D. H	Public sale of cattleBuggiesFarm for saleMillet and hungarian.

The Some Circle.

To Correspondents.

The matter for the Home Circle is selected Wednesday of the week before the paper is printed. Manuscript received after that, almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

Easter Morning.

Open the gates of the temple;
Spread branches of palm and of bay;
Let not the spirits of nature
Alone deck the Conqueror's way.
While Spring from her death sleep arises
And joyous his presence awaits;
While Morning's smile lights up the heavens,
Open the beautiful gates.

He is here! The long watches are over, The stone from the grave rolled away. "We shall sleep!" was the sigh of the mid-

"We shall rise!" is the song of to-day.
O music! no longer lamenting
On pinions of tremulous flame,
Go soaring to meet the beloved
And swell the new song of His fame.

The altar is snowy with blossoms,
The font is a vase of perfume;
On pillar and chancel are kung
Fresh garlands of eloquent bloom.
Christ is risen! with glad lips we utter,
And far up the infinite height
Archangels the pums re-echo Archangels the pæns re-echo And crown him with lilies of light.

-Frances L. Mace.

Yield all the days their dues,
But when the evening light is lost or dim,
Commune with your own spirit, and with Him!
Restore your soul with stillness as is meet,
And when the sun bids forth, haste not to Your strength, but kneel for blessing ere you

And meekly bind the sandals on your feet.

—Thomas Ashe

And if division comes, it soon is past;
Too sharp, too strange an agony to last!
And like some river's bright, abundant tide,
Which art or accident had forced aside,
The well-springs of affection, gushing o'er,
Back to their natural channels flow one
more.

—Mrs. Norton.

God sent his singers upon earth
With songs of sadnsss and of mirth,
That they might touch the hearts of men,
And bring them back to heaven again.
—Longfellow.

The History and Growth of the Young Men's Christian Association.

The first association takes us back to 1844, in London, where a young man of 23 years of age, George Williams, commenced a small prayer meeting among his fellow clerks. He was a junior assistant in the large dry goods house of Hitchcock & Co., St. Paul's churchyard, London, now Hitchcock & Williams. In those times clerks were boarded in the upper rooms of the large business warehouses, and a small society was formed, for the purpose of "impreving the condition of young men in the drapery and other trades of the city." This was carried on weekly without much notice till 1851, when similar societies were organized in Paris, Geneva, Australia, Montreal and Boston. Americans being over in London to the great Industrial Exhibition in 1851, eaught the idea, and on December 9, 1851, the Montreal association was organized, and on December 29, the Boston association

Not till the spring of 1852 did the follow ing cities move, viz.: Worcester and Springfield, Mass.; Buffalo; Portsmouth, N. H., Washington and New York, when, in this order of time associations were organized at these points. Let us notice the marvelous development of this movement in thirty-six

AMERICA.

One thousand two hundred and forty associations; 176,000 members, of whom 86,000 are active members.

One hundred and thirty-two own buildings of a net value (with other real estate, and furniture and libraries) of nearly \$7,000,000 Building funds pledged, \$1,325,000.

Seven hundred and fifty-two general secretaries or assistants are employed in the

Five hundred and eighty-nine associations report annual current expenses of \$1,057,000. Five hundred and ten associations report reading rooms and 384 report libraries.

Three hundred and eighty libraries are reported as valued at \$328,330.

Five hundred and forty-two associations report furniture valued at \$511,599. Two hundred and twenty five associations

have gymnasiums now. Eighty-three associations have gymnasium

superintendents. Five hundred and ten associations report as Young Men's Christian Associations in or them."-Washington Dispatch.

The importance of this work may be judged from the fact that the 1880 census gives 300 cities in America of 7,500 population and over, and that 101 of these cities employed Young Men's Christian Association Secretaries. In New York State and in Pennsylvania and other States associations are found in nearly all the important towns, and State Secretaries are employed constantly in supervising the district and Christian Association mo organizing new associations.

One of the most remarkable features of the Young Men's Christian Association movement is found in the

Two hundred and seventy three college associations are established among 39,069 students.

Two hundred and thirty-two report active membership 10,927; and it is a gratifying fact that 12,370 students of the 40,000 found in the colleges of our land are enrolled as members of evangelical churches.

A striking announcement is made, that as an outgrowth of this movement, Mr. L D. Wishard, International College Secretary, who has been visiting the colleges on the Pacific coast, is to visit Japan and the other cities of the Orient, to further the work among high schools and colleges. A great impetus has been given to this work by Mr. Moody's summer school at Northfield, and by Professor Drummond's great intercollegiate work. Mr. Ober, College Secretary. and Mr. Sayford, College Evangelist, are doing a work among our colleges of untold value and spiritual blessing.

BAILROAD ASSOCIATION.

Seventy-three railroad branches are in operation.

Sixty-seven report a membership of 13,834 Sixty-four general secretaries and seventeen assistants are employed.

Fifty-two report 7,887 visits to sick and injured men.

Thirty-seven report 101,241 baths taken. This work appeals to all who travel on our railroads, as it benefits so largely that class of railroad men upon whose faithfulness the traveling public is so dependent. The building movement has just commenced in this department, as buildings are owned at only about a dozen points, the chief of which are in New York State. The current expenses of these railroad branches are now over \$104,000 per annum, a large part of which is made up by the railroad corporatiens themselves and the railroad men. This is referred to under New York State ssociation work, and is the most striking

GERMAN YOUNG MEN'S CHRISTIAN ASSOCIATIONS.

feature of the work.

There are about twelve German associations, with a membership of 1,340. Of this number about 600 are active members. This new department of the work is on behalf of the large class of the German population which is now found in our cities.

COLORED YOUNG MEN'S CHRISTIAN ASSO CIATIONS.

Twenty-six associations report a membership of 2,029; active membership, 1,446. These associations are found in the South, and afford an interesting evidence of the cosmopolitan character of the work, and prove the reality of the zeal and love of Christ pervading the work.

INDIAN YOUNG MEN'S CHRISTIAN ASSOCI ATION.

Fifteen associations have a membership of about 300. These are found in Dakota, and one in Alaska and Manitoba, and their progress must always be an object of interest. BOYS' WORK.

One hundred and fifty-eight associations report special boys' departments. This is one of the chief new departures of the Young Men's Christian Association work. The most approved plan is to have a special boys' reading room and recreation rooms, in their behalf and to guide them in out- \$285 20; laundry, \$313 75; mattress factory, door sports. The main association receives them when they become of age and thus secures the rising generation of boys.

So much for America. Let us now take a plance at the Young Men's Christian Associations of the world, as given in the table below. It will be seen that this is indeed a world-wide movement. In Scotland, Germany, Holland, Switzerland, Japan, and parts of England, what are termed associations differ from what is popularly known

average attendance at reading rooms 26,791. America. There are in these countries a large number of young men's prayer meetings in connection with the churches that are affiliated with the association organization. Of course, in the large towns and cities they have associations similar to the American, but the greatest development of the various departments of association work proper is to be seen in America. New York is the banner State in this Young Men's

Christian Association	1 шоленови
THROUGHOU	T THE WORLD.
America1,248 Canada	
England 306	Japan 200
Scotland 267 Ireland 56	
France 80	India
Germany 678 Holland 514	China 5
Switzerland 208	Asiatic Turkey 12
Norway 48	Hungary, etc 4
Sweden 18	
Italy	Syria* 6
	9.014

*It is interesting to note the fact that a Young Men's Christian Association is organ-ized at Nazareth, where Christ lived for thirty years, and at Jerusalem, where he was cruci-fied.

-Christian at Work.

Facts Concerning the Working Women in Great Cities.

Carroll D. Wright, Commissioner of the Department of Labor, submitted to the Secretary of the Interior his fourth annual report, which deals exclusively with the subject of "Working Women in Great Cities." The facts in the report have, in the main, been collected by women agents of the Department. The report shows that the working women in the great cities are practically girls. The average age in all the cities comprehended is 22 years and 7 months. The general average age at beginning work is shown to be 15 years and 4 months. The average period during which the women have been engaged in their present occupations is shown to be four years and nine months, and that of the 17,427 women interviewed, 9,540 are engaged in their first trial at earning their own living. Of the whole number 14,120 are native born. In the foreign born Ireland is most largely represented, and Germany is next, having 775. Of the native born 12,904 had foreign-born fathers, and 12,406 foreign-born mothers. A great majority of the women are single, the number being 15,387. Only 745 are married, and 1,038 widowed.

The report shows that of the 17,426 who reported their health conditions at the time they began work, 16,360 were in good health, 883 were in fair health, and 183 in bad health. The change in the health condition is illustrated by the fact that 14,554 are now in good health, 2,385 are in fair health, and 489 are in bad health.

In home conditions, 12,020 report themselves comfortable, while 4,693 state that their home conditions are poor, and "poor," in this investigation, says the Commissioner, is poor indeed.

The average weekly earning, by cities, is given as follows:

Atlanta, \$4 05; Baltimore, \$4 18; Boston, \$5.64; Brooklyn, \$5.76; Buffalo, \$4.27; Charleston, \$4.22; Chicago, \$5.74; Cincinnati, \$4 50; Cleveland, \$4.63; Indianapolis, \$4.67; Louisville, \$4.51; Newark, \$5.10; New Orleans, \$431; New York, \$5.85; Philadelphia, \$5.34; Providence, \$5.51; Richmond, \$3 93; St. Louis, \$5 19; St. Paul, \$6 02; San Francisco, \$6 91; San Jose, \$6.11; Savannah, \$4.99; all cities, \$5.24

A few of the leading industries and the average yearly earnings of women in each are given as follows:

Artificial flowers, \$277 53; awnings and tents, \$276 46; book-binding, \$271 31; boots and shoes, \$286 60; candy, \$213 59; carpets, \$298 53; cigar boxes, \$267 36; cigar factory, \$294 66; cigarette factory, \$266 12; cloak factory, \$291.76; clothing factory, \$248 36; cotton mills, \$228 32; dress-making, \$278 67; with a secretary specially to interest himself dry goods stores, \$368 84; jewelry factory, \$263 80; men's furnishing goods factory, \$392 24; millinery, \$345 95; paper box factory, \$240 47; plug tobacco factory, \$235 67; printing office, \$300 06; skirt factory, \$265.40; smoking tobacco factory, \$238.72.

In the concluding part of the report the Commissioner says: "A quarter of a contury ago ago women were allowed to enter but few occupations. Now there are hundreds of vocations in which they can find employment. The present report names 342

Motherhood.

Among crude nations maternity is simply an animal function; birth is of the body more than of the spirit. It is inevitably so. The race first needed numbers and strength. It had to battle against the winds and waters, fire, famine and cold. Nature must be subdued and the soil cultivated. Who cares, then, for weak women and puling babes? Vikings were needed, swart, brutal and strong. When masculinity ruled a premium was placed upon boys, and with the birth of a daughter, to the mother there was also born shame and fear. The feeling of masculine superiority has not yet died out. It will not until the plow share is beaten into the pruning-heek; until the finest and most exalted human powers are near their blossoming and the world at large recognizes that these belong to the feminine side of life.

During the clangor of war and greed she was most honored who produced those types which could best rule their fellows and dominate nature. Now that external forms of civilization have reached a high degree of refinement and beauty, when on the one hand enervating luxury causes the married to shrink from the care and confinement of children and on the other poverty renders them incompetent to give offspring a decent rearing, they are not wanted. And the sun shines on no more pitiful sight than on an unwelcome child. Of such come the revengeful, the criminal and the depraved.

Naturally anather reaction will take place and the balance finally be found. That will not come to pass till the true relation is established between intellect and intuition, love and wisdom.

At present there are mothers who are not mothers. In the true sense they have never borne the children they rear to maturity. Such are not to blame, they have never learned what life means nor do they know themselves. Walking as in a dream they take the show of things for the reality. Unwinged butterflies, they flourish their feeble day and leave no impress upon their starved progeny.

On the other hand the unwedded, or they who have never known a mother's fruition, often stretch out the arms of their spirits to take in all the sad, sick and weary that desolately walk the earth. The mother instinct is then not narrowed selfishly to one family, but grows broad as the heavens from which came a love so wonderful. It takes in whoever needs "mothering" to shelter on the great heart that waits not for the human tie before accepting that of the spirit. Is not this truly the highest and holiest motherhood to which woman can attain?

The true feeling of motherhood still exists in all its perfection, even though the usual exhibitions be generally external. Said a wise woman lately: "I never thanked the Great Mystery for Jesus till I knelt by the cradle of my first-born. What was it floated in and ensphered my consciousness but the subjective revelation of an inexpressible and holy love, the conscious throb of an Infinity rooted in human veins. There is nothing so glorious and so awful under the sun, the rejected woman-hand patiently lifting through the ages the supreme Humanity to its throne!"-Good Housekeeping.

So ran the dire warning which Dante read on the portals of the Inferno. So runs the cruel verdict of your friends if you are overtaken by the first symptoms of that terrible disease, consumption. "Leave hope behind! Your days are numbered!" And the struggle against death is given up in despair. But while there is life, there is hope. Dr. Pierce's Golden Medical Discovery has cured hundreds of cases worse than yours; and it will cure you, if taken in time. But delay is dangerous. No power can restore a wasted lung: the "Golden Medical Discov ery," however, can and will arrest the dis-

John Roll, residing in Redmon, Edgar Co., Ill., is the owner of a horse that is twenty hands high, weighs 2,500 pounds, and is said to be the largest horse in the world. It is five years old, never was off Roll's farm, never has been broken, and has never been

Offensive breath vanishes with the use of Dr. Sage's Catarrh Remedy.

The Houng Folks.

When Spring Began.

While roaming in the wood one day, I asked the question, half in play, "Who sax tell when spring began?" Straightway the answer came, "I can!" And robin redbreast cocked his head. "All right! Then pray proceed," I said.

"I must," said he, "express surprise That any one with two good eyes, Or even one, should fail to see Spring's coming must depend on me. When I come, then will come the spring, And that's the gist of the whole thing."

"Ho, ho! He, he! Well, I declare!"
A squirrel chuckled, high in air,
"That is too droll—that you should bring,
Instead of being brought, by spring.
I hadn't meant to boast, but now
The cause of truth will not allow
My stience; so I'll merely state
That spring for me must always wait.
The thing admits not of a doubt;
Spring can't begin till I come out."

"Well, bless my stars! For pure conceit,"
Began the brook, "you two do beat
All I have heard. As if 'twere true
Spring never came at all till you
Were born, and can't come when you're dead!
I'm sorry, sir, you've been misled,
But I can set you right. I know
Sering comes when I begin to flow,
When my ice melts, and not till then,
Spring dares to venture forth again."
—Our Dumb Animals. -Our Dumb Animals.

The Easter Miracle.

Through the brown, mellow mold
The crocus lifts its crown of white and gold:
Among the bloom that clothes the orchard Hum the awakened bees.

In every pleasant place A myriad flowers spring up in fragile grace, Where, through the winter darkness, still and deep, Spring called them from their sleep.

The gracious rain, the dew, The sun, perform their miracle anew; Reanimating life—a subtle breath— Thrills the cold heart of death.

But not to earth alone Shall the great mystery be known; Oh, soul that questionest in doubt and pain, Thou shalt not ask in vain.

Behold how all things grow! The prescient germs, stirring beneath the snow, Break from their bonds at last and find the

As Eastertide draws nigh.

Se shalt thou likewise wake, Thy narrow cell, thy cerements forsake, Clothed in immortal youth, seeking eternal -Mary H. Krout. Arise and go thy way.

HOW AXES ARE MADE.

Externally there is nothing in the least attractive about a great ax manufactory. The principal building is a leng, low, dingy structure utterly devoid of paint or ornament. Not until the visitor gets inside and begins to take an inventory of his surroundings does he begin to be impressed by the greatness of the works. A glance into the engine room whence metive power is supplied to the various departments, shows that the quantity of machinery must be enormous. The engine is a stately piece of mechanism, majestic in its movements and gigantic in its proportions. The fly-wheel is forty-two inches in the rim and twenty eight feet in diameter, supplying continually a force equal to 400 horse-power and capable

As one enters the main workshop a noise equal to that made by a score or more of heavy freight trains falls upon the ear. This place is full of huge machines, glowing furnaces and busy workmen. But the most noticeable thing is the ceaseless clatter, which only subsides in one quarter to break out with renewed force in another. A few minutes of watching, however, shows that the confusion is apparent rather than real. The work progresses steadily, methodically and orderly. At one side of the room a man is thrusting into a furnace straight, flat pieces of bar iron, which a minute or two later be come perfectly-shaped axes, entirely comexception of the blade. How is the metal so suddenly transformed! Let

The glowing bars leave the furnace and are taken to a powerful and somewhat complicated machine, which performs upon them four distinct operations—shaping the metal to form the upper and lower parts of the ax, then the eye, and finally doubling the pirce over so that the whole can be welded together. A workman stands by, seizing the partially fashioned pieces one after another with a pair of tongs and hammering the lower edges together. Next the sentiment, as many old folk songs have

under a tilt hammer and is welded together in a second. This done, one blow from the "drop" and the poll of the ax is completed and firmly welded. Two crews of men are doing this class of work, and each crew can make 1,500 axes per day.

When the ax leaves the drop there is some superfluous metal still adhering to the edges and forming what is technically called a To get rid of this fin the ax is again heated in a furnace and then taken in hand by a sawyer, who trims the ends and edges. This operation is most curious and interesting. The operator has a glass in front of him to protect his eyes from the sparks which fly off by hundreds as the hot metal is pressed against the rapidly-revolving saw. The iron part of the ax is now complete.

The steel for the blade, after being heated, is cut by machinery and shaped with a die. It is then ready for the welding departments A groove is cut in the edge of the iron, the steel for the blade inserted, and the whole firmly welded by machine hammers. Next comes the operation of tempering. The steel portion of the ax is heated by being inserted in pots of molten lead, the blade only being immersed. It is then cooled by dipping in water, and goes to the hands of the inspector. An ax is subjected to a good many rigid tests before it is pronounced perfect. The steel must be of the required temper, the weight of all axes of the same size must be uniform, all must be ground alike, and in various other ways conform to an established standard.

Consequently the different inspectors who pass judgment on the ax after each process have a highly important duty to perform. The inspector who tests the quality of the steel does so by hammering the blade and striking the edge to ascertain whether it be too brittle or not. An ax that breaks during he test is thrown aside to be made over.

Before the material of an ax is in the proper shape it has been heated five times, including the tempering process, and the ax when finished has passed through the hands of about forty workmen, each of whom has done something toward perfecting it. The English workmen, I am told, have a different way of making axes. There one operative begins the work, puts the metal through all the intermediate processes and finishes the tool himself. Division of labor and improved machinery give the American manufacturer great advantages. Axes are exported from this country in large quantities.

The ax, with the iron and steel work finished, goes to the grinding department. Here about fifty huge grindstones, turned by steam power, are arranged in rows along the two sides of the room. The workman runs a wooden handle through the eye of the ax, helds the tool upon the stone, and how the sparks fly! He grinds the poil on the sides, ends and edges, until each is perfectly smooth, then turns his attention to the blade, upon which he puts a fine, sharp edge. When the grinding is dene the axes go to the polishing department and are applied to emery-wheels until they shine all over like silver. The side of a bright, new ax would make no mean substitute for a mirror. Next the name of the manufacturer or selling agent is stamped upon the head of the ax by a sort of steel engraving process.

A steel plate with the inscription upon it is coated with ink and from it an impression is taken on paper. The paper is then applied to the ax and the ink transferred to the latter, Acid is then put on to eat away the metal and leave the inscription in proper shape. The axes are now painted and hung on big drums, several hundred on each drum, to dry. They are next packed in wooden boxes ready for shipment. A trapdoor is opened in the floor and the cases are run down a slide into a freight-car waiting below to receive them. The finest axes are put up in small paper boxes, only one ax in each box, as carefully as if they were glov or stationery, instead of simple tools for the use of the rugged woodsman. The paper boxes are then packed in wooden cases like the others.-Pittiburg Dispatch.

Origin of "John Brown's Body."

In the song "John Brown's Body" we have an example of a melody and a set of words which seem never to have been written or composed by anybody. It is a genuine "folk song," growing out of a widespread

iron is put into a natural gas furnace and heated to a white heat. Taken out, it goes musical wants of the common people than musical wants of the common people than any carefully prepared and cleverly composed song could be. In the case of this song, however, its recent origin and almost instant growth into common use give us an opportunity to trace its beginnings and development in a way which is impossible with older songs.

The tune of "John Brown's Body" had its origin before the words that are now known or remembered in connection with it. It was sung before the war of the rebellion, as long ago, at least, as 1856, to words which do not now remain in use, at certain New England camp-meetings and revival services.

Two members of the Boston militia company called the "Tigers," happening to be at a camp-meeting in a small town in New Hampshire, heard the song sung to religious words and remembered the air. The name of one of these men was Purington, and of the other John Brown.

Not long after this the war broke out and the "Tigers" were made a part of the Twelfth Massachusetts regiment of volunteers, which rendezvoused at Fort Warren, in Boston harbor. Here the two men already named, Purington and Brown, formed, with two others named Edgerly and Greenleaf, a quartet, and the quartet sang, among its other songs, all sorts of words of their own "getting up" to this tune.

John Brown was a good-natured Scotchman, and the members of the quartet say they sang "John Brown this and John Brown that" to the tune, until, by an almost unconscious change the hero of them was changed from John Brown, of the "Tigers," to John Brown of Harper's Ferry, and the grand and simple verse came into existence: 'John Brown's body lies a-mouldering in the

ground, But his soul is marching on."

Before this time the masses of the North had not been in exact sympathy with the purposes of John Brown, but the excitement of the early days of the war called out a sentiment which these words exactly fitted. Whenever the soldier quartet were in Boston they were called upon to sing this song. The Twelfth regiment took it up. Samuel C. Perkins, of Brockton, a member of Maitland's band, which was stationed with the regiment at Fort Warren, wrote down the air, while a soldier whistled it. Then the band played it every day.

When Edward Everett formally presented the set of colors of the Twelfth Regiment on Boston Common, the speech of acceptance being made by Colonel Fletcher Webster of the regiment, the tune was played, and the multitude fairly went wild over it. The band played the tune going up State street in June, 1861, and the soldiers saugit as they marched along. The crowd along the sidewalk took up the air and joined in the

"Glory, glory, hallelujah, His soul is marching on!"

Soon after the regiment sang it in marching through New York on the way to Baltimore, with the same effect. It spread at

\$93 Sewing Machine Free

we will seep and simply show inces samples to mose who cally we will send, free, the very best Sewing Machine manufactured in the world, with all the attachments. This machine is made after the SinosEp patents, which have expired. Before the patents run out, this style machine, with the strachments, was sold for 585; it now seels for \$20. Reader, it may seem to you the most WONDERFUL THING ON EARTH, but you can secure one of these machines ABSOLUTELY FREE, provided your application comes in first, from your locality, and if you will keep in your home and shew to those who call, a set of our elegant and unequaled art samples. We do not ask you to show these samples for more than two months, and then they become your own property. The art samples are sent to you ABSOLUTELY FREE of cost. How can we do all this—easily enough! We often get as much as \$2,000 or \$3,000 in trade from even a small place, after our art samples have remained where they could be seen for a month or two. We need one person in each locality, all over the country, and take this means of securing them at once. Those who write to us at once, will secure, FREE, the very best Sewing Machine manufactured, and the finest general assortment of works of high art ever shown together in America. All particulars FREE by return mail. Write at once; a postal card on which to write to us will cost you but one cent, and after you know all, should you conclude to go no further, why no harm is done. Wonderful as it seems, you need no capital—all is free.

Address at once,

TRUE & CO., Augusta, Maine.

once through the army and throughout the country, and became the anthem of the Union.

In December, 1861, Mrs. Julia Ward Howe wrote for the air the words beginning

"Mine eyes have seen the glory of the coming of the Lord," which was called "The Battle Hymn of the Republic," which soon became immensely

popular, but never supplanted in common use the old simple words. This is the story of the origin of "John

Brown's Body," as told by the members of the band and the regiment with whom it had its use as a popular song.-Youth's Companion.

Scrofula is transmitted from parent to child, and thus becomes a family inheritance for generations. It is, therefore, the duty of every scrofulous person to cleanse his blood by a thorough and persistent course of Ayer's Sarsaparilla.

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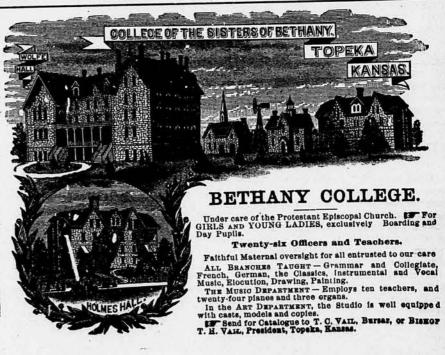
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KANSAS FARMER COMPANY.

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J. CRAWFORD, - - PERSIDENT.
B. MOAFEE, - - VICE PERSIDENT.
A. HEATH. - BUSINESS MANAGES.
A. PEFFER, - MANAGEME EDITOR.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

An extra copy free one year for a Club of x, at \$1.00 each. Address EANSAS FARMER CO., Topeka, Kansas.

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Display advertising, 15 cents per line, agate, (fourteen lines to the inch).

Special reading notices, 25 cents per line.

Susiness cards or miscellaneous advertisements
will be received from reliable advertisers at the rate
of \$5.00 per line for one year.

Annual cards in the Breeders' Directory, consisting
of four lines or less, for \$15.00 per year, including a
copy of the Karsas Farmen free.

Electros must have metal base.
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case,
will not be accepted at any price.

To insure prompt publication of an advertisement,
send the cash with the order, however monthly or
quarterly payments may be arranged by parties who
are well known to the publishers or when acceptable
references are given.

references are given.

33 All advertising intended for the current week should reach this office not later than Monday.

Every advertiser will receive a copy of the paper weed during the publication of the advertisement.

Address all orders,

KANSAS FARMER CO.,

The Department of Agriculture at Washington reports the condition of wheat throughout the county, April 1, as unusually good.

Heavy rains are reported from differportions of the State. Ground is in excellent condition for the planting of corn and other spring crops.

By a recent order of the Secretary of the Interior, persons intending to settle in Oklahoma are permitted to cross the Cherokee outlet before the 22d day of

From the latest commercial reports it appears that steel rails are selling at \$27 a ton, which is \$1.00 per ton less than the tariff duty on steel rails from 1872 to 1883.

A counterfeit silver dollar is in circulation. It is made of brass, with a thin coating of silver. It is said to genuine coin.

The people in some of the counties are having trouble about appointment of Post Masters. This is another indication that the men who handle our mail ought to be chosen by the people.

The farmers of Kansas and all wheatgrowing States, as far as we can learn, have made up their minds not to purchase any binding twine this year unless it can be bought at reasonable rich men long enough. The day of

A convention of persons interested in silk culture was held at Wichita last week. Several interesting and instructive addresses were delivered. It appears that the production of silk in Kansas is gradually increasing.

It will be well for farmers to be on when so many people have the Oklahoma fever, for we are informed that Plumb, on the sugar question. The there is a good deal of horse-stealing going on in the several counties of the interest in the development of the su-

The quarterly session of the Butter days ago. Among the prominent dairy-Chicago. The association is trying to are these; that interest in the subject unheeded. establish a board of trade.

THE MEAT PACKERS PLEADING.

Last Friday's Kansas City Journal contained an editorial article under the heading, "Give the Packers a Show." We copy it in full:

heading, "Give the Packers a Show."
We copy it in full:

The packers of this city have submitted a memorial to the State Legislature, setting forth the fact that the dressed beef business has suffered great injury, owing to the recent agitation concerning it. That false reports concerning the manner in which it is conducted have resulted in very seriously curtailing the volume of business, the trade of one house alone, it is stated, having suffered a falling eff of \$36,000 within the past sixty days. The Legislature is asked to send a committee to investigate the business here, so as to thoroughly understand just how it is conducted. It is to be hoped that the Legislature will promptly act upon this suggestion, and it certainly will if it has any desire or intention of getting at the true facts in the matter. The packers court an investigation, and in view of the fact that so many malicious reports have been ofroulated in reference to their methods of doing business, it is but right that their request should be granted. There are such vast interests bound up in this matter that the Legislature cannot afford not to give it the most pattent and thorough investigation. During all the winter the enemies of the business have been pouring into the ears of the members of the Legislature thas apparently made no effort to discover if there are two sides to this question, as is its manifest duty, and inasmuch as the packers thus far have had no consideration, it would be no more than fair for the Legislature to give them an opportunity to refute the assertions of their enemies. It is quite possible that after a careful inspection of the business as conducted here, the Legislature may discover that it has had an altogether erroneous opinion concerning it. It is its manifest duty, however, to send a committee here and thoroughly investigate the matter before enacting any legislation on the subject.

This is the most encouraging sign we have observed since the war on the beef

This is the most encouraging sign we have observed since the war on the beef combine was begun. At first the movement was treated contemptuously. Packers inquired with an air of unconcern-"What are you going to do about it?" A good deal has been done. People quite generally made up their minds that there was a conspiracy somewhere and they located it in the packing companies. At last the conspirators feel the effect of a people's movement, and now it has gone so far as that the packers of Kansas City petition the Legislature to examine their processes and defeat the proposed inspection bill.

This is a good place to repeat what has been said several times in these columns, and nowhere else within the range of our knowledge—that the complaint of farmers is not against the methods adopted in the packing houses -methods of slaughtering animals and dressing the carcasses; that is not the base of complaint at all. The trouble arose from a conspiracy on the part of a few packers to get control of the cathave a bluish look when compared with the market, and it was so successful that in a short time the local cattle market was practically destroyed, making it obligatory on farmers to ship their cattle to Kansas City or Chicago and there accept prices fixed by the packers. Millions and millions of dollars have been thus wrenched from the farmers' grasp.

Let them sweat awhile, and they will learn a lesson worth knowing. The people have been outraged by a few retribution is at hand—has already come to some offenders. A great many wrongs will be righted before many years have passed. This prayer of the meat packers is the first sign of penitence. Reason will return in time and things will be evened up. All will yet be well.

their guard during these exciting times delivered in the Senate of the U.S. on We are in receipt of a convot the 17th day of last January, by Senator Senator has all along taken a very deep gar industry, not only in Kansas but in the United States generally. We have and Cheese Manufacturing Association not room now to review the speech nor of Kansas was held at Salina a few to give more than a synopsis of the many valuable facts which it contains. men present was Col. T. D. Curtis, of Those of most interest to our readers generally among the people of the "What the people,—the farmers—the self being seriously burned.

United States is increasing; that the bone and sinew of the land ask is that commercial value of the sugar maknig business in this country has been fully demonstrated; and that an establishment for manufacturing sugar by the new process can be erected for from \$60,000 to \$100,000. It may be stated further that the Senator believes the government will not neglect its duty to this young industry in the future.

Good Advice to the President

The Breeders' Gazette, in a well-written article, offering advice to the President, expresses our views on the subject in hand so well that we give the entire article to our readers:

President Harrison and his advisers that an intelligent comprehension of what is "good politics," considered from a purely parti an point of view, with no higher motive than that which springs from policy, will lead the administration to make an earnest effort to open up the markets of Germans and France to our pork, and of Great Britain to our cattle. It is certainly not good policy, in view of the depression under which the meat-producing interests of our country are suffering, to sit down quietly and say that nothing can be done; that the attitude of Germany and France toward our pork, and of Great Britain toward our cattle is assumed simply as a means of protection to home interests in these several countries, or as a measure of retaliation for the protective tariff doctrines which prevail in this country. Good policy would indicate rather that an earnest, honest effort be made, and made at once, to ascertain the real facts, and all the facts that bear upon the subject. If these restrictive regulations are really based upon a misapprehension of facts, whether wilful or or otherwise, let an intelligent and aggressive effort be made to enlighten not only the governments but the people of these foreign countries upon the subject. Let the people of Great Britain, France and Germany be accurately and truthfully informed as to the real condition of the cattle and swine of this country; let our own government ascertain what facts exist or what prejudices are fostered among the people which operate to sustain these several governments in their unfriendly attitude toward the live-stock interests of this country, and then we will be prepared to deal intelligently with the whole subject. If it should be found, as we think it will, that the restrictions which are imposed are based largely npon the misapprehension of the real state of things here, let those charged with the administration of our foreign affairs make an earnest effort in behalf of the farmers and stock-raisers of our country to correct these misapprehensions, through the public press and otherwise, in those countries which naturally ought to be among our best customers. If it shall be found, as we are sure it will, upon investigation that something might readily be done by the Executive department of our government without additional Congressional action which will go a long ways toward rmful restrictions, let us have these things done at once. If it should be shown, which we very much doubt, that we really need some additional Congressional legislation before we can countries and demand what belongs to us under existing treaty regulations, then by all means let the administration press the importance of this legis-

the new administration shall give this subject the consideration that its importance deserves. Our agricultural interests are groaning under the effects of the practical exclusion of our meats from European markets during the past ten or twelve years. It is "good politics" for the party in power to recognize this fact and to demonstrate that it is determined to do all that can be done to once more open these markets to our producers. If the effort be made—if the farmers of cur country know that the effort is being intelligently and earnestly made-whether it shall be entirely successful or not, it "The Gazette would like to suggest to will greatly strengthen the hold of the present administration upon our people. Aud if it shall be successful, as we honsstly believe it may be, it will be the brightest feather that can possibly be placed in the cap of President Harrison's administration. It will show, in any event, that there is something in view beyond the mere granting of rewards to political favorites or machine politicians who have no especial fitness for public place, but have simply been active in politics that they might live by it. The Gazette believes in politics, believes in party, believes in rewarding worthy men within the party, believes in sustaining the party that is right, believes that an honest man honestly believes in the party with which he acts, but beyond all this the Gazette believes that he serves his party best who serves his county best. Here is an opportunity for the present administration to show its intelligence, its sagacity, and its honesty in a matter that is really of more vital importance to the people of the United States than any other single question that can possibly come before it."

Our information from the western counties is to the effect that the farmers are going to plant more sorghum, bromcorn millet,rice corn, milo maize, kaffir corn, sweet potatoes, and melons, than in any former year. They are resolving to have big crops this year.

The Illinois State Board of Agriculture has resolved that for the next Fat Stock Show at Chicago the judges shall consist of one butcher, one breeder and one feeder. The different classes of persons engaged in the production of meat shall act upon the most important committee.

The state of trade is reported somewhat better. In the iron regions there has been less doing than at this tin e last year. The boot and shoe trade is said to be larger than ever. Exports of merchandise from New York for April first exceed that of the same time last year by about 18 per cent. Wheat has fallen considerably.

The State of Pennsylvania, through its Attorney Geberal, recently brought suit against the Western Union Telegraph Company, asking that its charter shall be forfeited for the reason that it had violated the provisions of the law granting its franchises in that it formed a union unlawfully with other corporasecuring a removal or modification of tions. The result of this proceeding will be looked for with much interest.

It may be of interest to our lady readers, more especially, to learn that a lady in this city came near losing her life a go with clean hands to these foreign few days ago from a careless using of gasoline. She was pouring the fluid upon a carpet which another person was rubbing, and the gas took fire from an open grate at one side of the room. lation upon the next Congress in such Immediately the whole room was in a manner that its voice will not remain flames, the furniture and building were badly damaged, besides the lady her-

The President of the United States recently issued a preclamation requesting the people to meet at their several places of worship on the 30th day of this month to commemorate the inauguration of George Washington, first President of the United States, April 30th, 1789 He requests, further, that, as was done on that day, the church bells be rung at nine o'clock in the

It appears from recent commercial reports that there will be more miles of railroad built during this year than in any previous year. The Railway Age presents a table showing that 666 new lines with an aggregate contemplated mileage of 53 436 miles have been projected since January 1st. last: that on these lines 14 818 miles are in construction or contract; 9,617 are surveyed, and 29,001 are incorporated or projected.

It appears that there are about five boomers to one quarter section of land in Oklahoma. It further appears that town site speculators, and other land gamblers are crowding upon the sett'ers, and that, as the sequel will show, is a dangerous proceeding. country ought to be as nearly as possible held sacred for men and women who want to make farms and establish homes, and the gamblers ought to be suppressed.

The American Meat Company, a new concern owning 2,000,000 acres of land and controlling all the necessary plant to supply meat in large quantities, appeared a few days ago and took subscriptions to a large proportion of the learning a project to compete with them, set about to defeat the American Meat Company, and did so in less than fortyeight hours. All of the shares subscribed for are canceled and the money returned.

Mr. Secretary Mohler, of the State Board of Agriculture, publishes the following note: "I desire to give notice to all interested that the distribution of biennial reports from this office is practically at an end. The members of the Legislature get of this report 2,610 more copies than on former occasions, thus reducing the number for distribution from this office just that number. All persons who desire this report are respectfully referred to their Senator or member of the House.

Favorable reports from all parts of the State continue to come in concernthe condition of the weather and the crops. It appears that wheat, both winter and spring, is in excellent con-(i ion, the fields showing many miles in the clear sunshine. Indications are that as to this crop Kansas will have more wheat this year than ever before. The exact number of acres in wheat we are not quite certain about, but are inclined to believe that, taking the State through, the acreage is larger than ever

Secretary Rusk, of the Department the Agricultural Experiment Stations recent law of Congres and are now con- purchase to make goods alres ducting scientific and practical experiments in regard to soil, tillage, manures, crops, stock-feeding, dairying and horticulture in the various States. All the Sta es and one territory (Dakota) now have agricultural experiment stations. The total number of these stations now in operation is forty-six, or including branch stations, nearly sixty. They employ more than 370 scientists and agriculturists, and will this year receive \$595,000 from the national government and about \$125,000 from the States and other sources.

The Abstract Law.

Under the provisions of a law passed at the late session of the Legislature, every person engaged in the business of abstracting titles is required to give a bond of \$5,000 to be approved by the county commisioners. It provides that the abstractor shall be liable on the bond; first, to the state of Kansas; second, to any person who shall be in any way damaged by any mutilation, injury or destruction of any record of the several county offices to which they may have access, to the amount of damage actually done said person; and third, the person, firm or corporation shall be liable on the bond to any person or persons for whom he or they may compile, make or furnish abstracts of title to the amount of damage done to said person or persons, by any incompleteness imperfection or error made by said person, firm or corporation in compiling the abstract. And the filing of the bond shall be a guaranty of the good faith and responsibility of said person, firm or corporation engaged in the said business of abstracting. The law provides that any person who engages in abstracting without first having given a bond shall be deemed guilty of a misdemeanor and fined not exceeding \$100 for each offense The law provides that upon the execution and filing of the bond, each person, firm, or corporation so filing such bond shall have free access to the county records of the several county offices for the purposes of the prosecution of their business of abstracting, and the compiling, posting and keeping up of their abstract books necessary for capital; but the Chicago packers, the proper conduct of their business, under the direct supervision of the county officers having the legal custody of the records, and while handling and using the county records the abstractors shall be under the same obligation to protect and carefully keep and preserve the records as the several county officers who have the legal custody of the records, and subject to the same penalties for a violation of such duty as the officer would be. Another provision of the law is that any officer who shall prevent or prohibit any person who has complied with the provisions of this act from a proper use of the records of their said office as hereinbefore provided shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding \$100 for each and every offense.

St. Louis Wool Market.

From the wool circular of Hagey Bros., under date April 10, we extract the following:

Our wool market is opening excited with strong competition between buyers, and our daily receipts of early shearing from mutton sheep are meeting sale as quick as we can open, examine and grade. The deficit of 50,000,-000 pounds in the last season's clip of the United States, and the very light stocks of wools in all the markets, seem to be a guarantee that prices have of Agriculture at Washington, has just opened on a fair basis, and will not deissued a pamphlet giving the history of cline in the near future. Manufacturers have less on hand than at any time break up in February, the first wild which have been established under a for several years, and are compelled to flowers often appearing before the end The Secretary of the Treasury has come to the relief of the American grower by making certain imported wools pay a duy of 20 cents per pound that heretofore have only paid 10 cents per pound, and will continue to properly levy duty on all as they should be, according to the just and lawful meaning of the present tariff, and which here tofore has been evaded. The exceedingly mild winter just passed, causing a very light consumption of woolen goods, is being urged as a factor to de-

no effect on the market values; yet as the season advances and buyers get stocks to work on they may succeed in establishing a lower range of values. Now while our market is excited and wool in demand, if growers will shear and ship early they will receive good prices and quick returns.

Prices herewith are as near as we can get at actual values from sales made of the early shearing:

TUB-WASHED.	
Fancy Choice : : : : : : : : : : : : : : : : : : :	35a36
TEXAS UNWASHED.	URLOG
Medium 12 months	0a22 17a22 16a20 19a22 16a20
MISSOURI, ILLINOIS, IOWA AND EASTER	LN
Medium fancy. Medium ohoice. Fine. Braid. Common. Cletted. Burry, 2 to 5 cents per pound less.	6 a22 17 a 19
KANSAS AND NEBRASKA UNWASHED.	
Medium fancy 2 Medium choice 2 Medium medium fine 1 Medium low 2 Light fine 2 Light fine 2 Heavy fine 1 Heavy Merino 1 Common and black 1 Carpet 1 Dead pulled 1 Burry, 2 to 5 cents per pound less.	20a24 19a20 20a22 20a22 5a17 6a19 6a18

Prof. Snow's Weather Statistics.

From a recent circular issued by Prof. Snow of the State University we gather the following:

During twenty-one years of observatien there has been only one drouth extending over the entire state of Kansas. This was in the year 1874, since which time there have been but two partial crop failures of anything more than a local character. This table also indicates the existence of a rainfall cycle of about seven years of precipitation above the average and a similar series of years of precipitation below the average. Thus the years 1868—1869—,1876—1878, and 1883—1885 exhibit an excess of rain. while the intervening periods exhibit a deficiency.

The autumns of Kansas furnish the most enjoyable weather of the year, the mild Indian summer frequently continuing until nearly Christmas.

The winters of Kansas have enough rigor to protect the population from the chronic languor too often engendered by a southern climate. Without the extreme severity which benumbs the faculties, the winter temperature is sufficiently low to impart that healthful stimulus to mental and physical activity which seems essential to the highest development of the human race.

Of the twenty-one winters whose records are before us, twelve have been of moderate temperature, with mean between 26 and 32 degrees; five have been severe, with mean below 25 degrees, in one winter (1874-5) reaching 22 70 degree; and four have been exceedingly mild, with mean above 32 degrees, in one winter (1877-8) reaching 39.54 degrees. The winters generally

March and November have in one or two instances been winter months. while May and September are occasionally summer months. The second half of May and the first half of September frequently belong to the summer season. The mean annual temperature is a little less than 53 degrees, which does not differ essentially from that of states to the east of Kansas in the same latitude

In their effect upon the population the summers of Kansas are less oppressive and exhausting than might be inpress prices of wool, but so far has had ferred from their frequent length and very large.

high temperature. Of the twenty-one summers which have been of medium temperature, four have been very hot and four very cool. The medium summers are comfortable, the cool summers are delightful, and there are important compensasions by which the hot summers are rendered far more tolerable than those of states to the east of Kansas between the same parallels of latitude. Among these compensations are the general coolness of the nights, no matter how hot the days may be; the unusual dryness of the atmosphere, which cools the surface of the body by a more rapid evaporation of the perspiration; and the almost constant brisk movement of the air, which rarely becomes calm.

In the eastern states the amount of rain, including melted snow, is nearly as large in winter as in each of the other seasons. In Kansas, which has less rain in winter than any other state in the union except Minnesota and Nebraska, the apparent deficiency is abundantly made good by a more copious supply of rain in spring, summer and autumn than is received by many of the other states.

The distribution of rain through the months of the year is highly conducive to agricultural prosperity. Beginning with January, in which the average precipitation is reduced to its minimum, there is a constant increase in the average for each month until June and July, when the rainfall reaches its maximum and begins to decline, each succeeding month showing decrease in the average amount, until the minimum is again reached in January. It is rarely the case that the monthly rainfall during the growing season departs from the normal to such an extent as to seriously injure the staple crops.

A correspondent calls our attention to a communication—"Figures Won't Lie" which he forwarded to this office weeks ago, and he wants to know why we did not publish it. Editors do not expect, ordinarily, to give reasons for not publishing communications; they have not time to spare, and it would do no good; but we will say to our friends that while figures do not lie, it sometimes—frequently indeed—happens that people lie with figures. Our correspondent did not do this, however; he simply presented some figures which did not prove anything pertinent to the proposition to which they were intended as

Stevens county is in extra good condition this spring; so our special reporters say.

Single heavy horses are very generally superseding lighter double teams for that class of city hauling to which they are especially adapted. On smooth pavements a horse of this kind can draw an immense load—indeed the ordinary driver seems to think that the limit of strength has yet to be discovered. This class of hauling would furnish a market for a great deal of heavy draft stock. if there were no other source of demand. However, the field for the draft horse is constantly widening in other directions as well.

Among other army contractors of high degree ing the war was one who had purchased, as the highest bidder, the head horses of the army of the Potomac, for which he paid \$1.76 each delivered at his "establishment." They averaged, in the winter, fifty a day, and were thus disposed of: First, the shoes were pulled off; then the hoofs were cut off; then the manes and tails were sheared. The animal was then skinned, the carcass was boiled that the tallow might be extracted, the best of the bones were sold for knife handles, and the remainder for fertilizers. The total result was that these different parts of the dead nag were worth when prepared for market at least \$25 a head, and the profits of the contractor were consequently

Borticulture.

THE CODLING MOTH (CARPOCATSA POMONELLA, L.)

Read by N. P. Deming, at the Farmers' Insti-tute held at Lawrence, April 6, 1889.

Next to the round-head and flat-head borers, which destroy the tree itself, the codling moth may be considered to be the most dangerous among the one hundred and seventy-six insect foes which attack the apple tree, its foliage and its fruit. "The damage produced by this insect," according to Prof. F. H. Snow, our acting State Entomologist, "although not yet so extensive as in California and in the Eastern States, is increasing in extent as the insect reaches localities a distance from the railroads. At the present time it may be safely estimated that from one-fourth to one-third of the entire apple crop of the State of Kansas is ruined by this pest. An excellent method of destroying the insect is by trapping the full-fed worms by attaching bandages to the trees, within the folds of which the worms find a suitable place for constructing their cocoons. But it must be remembered that each worm thus trapped and destroyed has already ruined a good apple. We therefore prefer a method of entirely preventing the attack, or at least of reducing it to a minimum. Such a method is to be found in process of spraying the young fruit with London purple or Paris green. The London purple is the preferable insecticide and should be applied with a force-pump and spray-nezzle, while the calyx of the young apple is still turned upwards, using the poison at the rate of a tablespoonful to each bucket of water. The dilute poison forms a thin coating over the young by eating this poison, and we find the fruit and either prevents the deposit of the egg altogether, or poisons the young codling worms as soon as they hatch from the egg. The efficacy of this method has been carefully tested by so many competent experimenters that no doubt can be entertained of its good value."

We quote the following from Bulletin No. 7, for 1885 and 1886, by S. A. Forbes State Entomologist of Illinois:

"From the summary of the assessors" reports contained in the crop report of the State Department of Agriculture for August, 1884, I learn that the value of the average apple crop of Illinois for the five years preceding 1884 was about four and three-quarters millions of dol lars. From observations and experiments presently to be detailed we may infer about 50 per cent. of the possible apple crop of the State is sacrificed each year, on an average, to a single injurious insect-the apple worm or codling moth (carpocapsa pomonella, L.) That is to say, if it were not for this insect we might reasonably expect the apple orchards of this State to yield approximately twice their present income. To this codling moth, consequently, we may fairly attribute a loss to the farmers of Illinois of, say four and threequarters millions of dollars each year. A part of the apple crop reported, however, is doubtless obtained from neglected orchards, too badly damaged Pests of California, says he "has reto repay especial attention; and in ceived letters from parties where they many cases, also, where the trees are heavily loaded, the apples remaining with London purple, one pound to one uninjured after the codling moth has hundred and sixty gallons of water, and done its worst may amount to more than half the fullest crop permi sible. He would hardly regard fruit sprayed Making for these and other modifying so many times, safe to eat, without a circumstances the liberal allowance of test for arsenic. There was fruit sent if the rubbing off of the supernumerary 50 per cent., I estimate the loss due to away for analysis, and not the slightest the apple worm at one-half the value of trace of arsenic found. On general early in the season, very little more will the average apple crop, or \$2,375,000 per principles he could hardly recommend be required than merely pinching back annum. It is the purpose of my report such excessive use. Analysis of fruit the tips of such shoots as are likely to to demonstrate that at least seven-sprayed twice with Paris green, have occupy too much space. There must be

tenths of th's loss may be prevented by a single remedial measure, so simple that any one may apply it, and without cost so far as its effect on the codling moth is concerned. This remedy is a thorough spraying of the trees with Paris green, London purple or arsenic.'

He also says that one year he sprayed his trees eight times, but twice spraying is sufficient, or even once if the weather is favorable.

Furthermore, he wishes to emphasize especially the point that spraying after the apples have begun to hang downward is unquestionably dangerous, and should not be permitted under any circumstances if the fruit is afterward to be used. The results of the chemical analysis reported last year show that even heavy winds or violent rains are not sufficient to remove the poison from the fruit at this season, and remembering that the stem end of the apple presents a large conical pit by which the poison could be received and held, where neither rain nor wind could dislodge it, we have additional reason for the absolute prohibition of the use of any poison dangerous to health except when the fruit is young.

Prof. J. A. Cook, of Michigan Agricultural college, says: "It is best to apply the mixture as soon as the blossoms fall, and again in three weeks, in case of any heavy rain. Usually, I find one thorough application, made early, so effective that I have wondered whether it was best or necessary to make more than one. I do think, however, that it must be early, when the calyx of the apple is up, and so the poison is retained sufficiently long to kill most all of the insects. The important thing is to scatter the liquid on all the blossoms or fruit and get just as little on as possible. The larva is killed faintest trace suffices for the purposa.'

Clarence M. Weed, State Entomologist of Ohio, says: 'A large portion of the orchards are either dead or in a dying condition, although here and there are seen large and thrifty orchards. I believe that in every case the reason for this difference will be largely due to the difference in the treatment they receive. Those which are dead and dying will be found to be wholly neglected, or only partially or improperly cared for, while these which are living to a vigorous and green old age, receive the attention they need. There was a time in the early history of this region, when fruit trees seemed to grow as naturally and well as the oak in its native forest, but that day has long since gone by; and the successful orchardist of the present must do something more than stick his trees carelessly in the ground, leaving them to have their leaves sucked dry by plant lice, or devoured bodily by canker worms and leaf-rollers, and their fruit, if happily they should survive to produce any, ruined by apple worms or stung by curculios, and with present prices of orchard products, the fruitgrowers can well afford to go to some trouble and expense to keep his trees thrifty and prevent insect injury to the fruit."

W. G. Klee have sprayed their trees four times no injurious effect on foliage or trees.

given no reaction, and if done early and carefully, I believe it safe to consumer, but eating of the fallen fruit should be guarded against until after the first two months after spraying, or until after heavy rains have fallen."

Now, my own experience is to spray the trees when the apples are about the size of a ful.-grown Concord grape. I use Paris green, one pound to sixty gallons of water. I left five trees unsprayed; I bandaged those five trees and five trees that were sprayed. On examining the bandages I find seven apple worms on the unsprayed trees, to one on those that were sprayed. I also sprayed the trunks of my trees with strong lye about the time the first brood of worms would wind up under the bark. The lye will kill these; it is also beneficial to the tree and ridding them of the apple tree root plant louse.

Last year I sprayed my trees with arsenic, one-half pound to eighty gallons of water. The result was very satisfactory, but I would prefer Paris green or London purple.

The following is the preparations by

S. A. Forbes: "Paris green-Thoroughly mix onehalf pound of Paris green with a little water, and stir this into twenty-five gallons of water in a tub or barrel.

"London Purple-Prepare as above. using a quarter of a pound of London purple to twenty gallons of water.

"Arsenic-Boil one ounce of arsenic in a quart of water until dissolved and a sufficient amount of foliage to feed add this solution to twenty gallons of

" If Paris green or London purple are used, the fluid must be frequently stirred to keep the poison from settling. The fluid should be thrown in the finest spray which the nozzle will emit freely, and applied until the leaves begin to drip. The first spraying should be made when the apples are about the size of a pea. If heavy rains occur within a week or ten days, the spraying should be repeated. To prevent the too free exposure of the workman to the poison, it is best that the spray should be applied when the air is still or from the windward side of the tree. Stock must not be allowed to run in the orchard until heavy rains have washed the poison into the earth. The trees should not be sprayed after the apples have grown large enough to turn down upon the stem."

I consider the force-pump and spray as necessary to the orchard as the plow is to the farm. Spraying will also kill the canker worm.

It is very disgusting to pick the nicest apple from the tree, and biting into it, find the outer beauty is caused by the hideous apple worm, which we discover inside.

As I have shown you the cartoon of the apple that has been ravaged by the apple worm, also one of the moth, now I will show you the codling moth in its natural state and the worm as it is rolled up in its cocoon, as it goes through the winter.

I believe the time will soon come when our Legislature will give us a State Entomologist that will inform our farmers and fruit-growers of our injurious insect pests, and how to destroy them. By so doing I think our State will save millions of dollars.

Summer Pruning of Grape Vines.

Heavy summer pruning, or lopping off leaves and branches after a good growth has been made, always checks more or less the vigor of the plant, and shoots has been properly attended to

In the treatment of slight ailments would save a vast amount of sickness and misery. One of Ayer's Pills, taken after dinner, will assist Digestion; taken at night, will relieve Constipation; taken at any time, will correct irregularities of the Stomach and Bowels, stimulate the Liver, and cure Sick Headache. Ayer's Pills, as all know who use them, are a mild cathartic, pleasant to take, and always prompt and satisfactory in their results.

"I can recommend Ayer's Pills above all others, having long proved their value as a

Cathartic

for myself and family."-J. T. Hess, Leithsville, Pa.

"Ayer's Pills have been in use in my family upwards of twenty years, and have completely verified all that is claimed for them."—Thomas F. Adams, San Diego, Texas.

"I have used Ayer's Pills in my fami-"I have used Ayer's Pills in my family for seven or eight years. Whenever I have an attack of headache, to which I am very subject, I take a dose of Ayer's Pills and am always promptly relieved. I find them equally beneficial in colds; and, in my family, they are used for bilious complaints and other disturbances with such good effect that we rarely, if ever, have to call a physician."—H. Voulliemé, Hotel Voulliemé, Saratoga Springs, N. Y.

Ayer's Pills.

Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Dealers in Medicine.

well the growing fruit. We have seen a vineyard ruined by cutting off shoots and leaves, under the mistaken view of letting in the sunshine on the grapes. It is the leaves that need the sunlight, and not the fruit. It is better to give too much vine and foliage above the grapes than too little. But there should not be so much as to present a crowded mass of leaves. As a general rule, the hardy, free-growing varieties should be so pruned as to leave the strong bearing shoots about a foot apart, more or less, which will give room for the fully developed leaves without crowding. Therefore, as early in the season as the new shoots have made an inch or two of growth, all those likely to prove supernumeraries should be rubbed off, leaving room for the remaining ones to grow. This is easily and rapidly done. "Lopping all shoots to two leaves," according to your mode, is not giving ample foliage, and if you cut away much that has already grown, you do a serious injury. It would be better to permit too dense a growth than to give this check, but best of all is not to allow enough shoots to grow so as to crowd each other. Some vines, however, will possess more natural vigor to withstand this treatment than others.-Country Gentlemen.



SKIN AND BLOOD DISEASES

NO PEN CAN DO JUSTICE TO THE ESTEEM IN which the CUTICURA REMEDIES are held by the thousands upon thousands whose lives have been made happy by the cure of agonizing, humiliating, itching, scaly, and pimply diseases of the skin, scalp and blood, with loss of hair.

CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, prepared from it, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, are a positive cure for every form of skin and blood disease, from pimples to scrofula.

Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMIOAL CO., Boston, Mass.

ENTER SUMPLES BISCKHERGS. CHAPPER and oily Elements.

Pimples, blackheads, chapped and oily skin prevented by Cuticura Soap. Rheumatism, Kidney Pains and Weakness speedily cured by Curioura Anti-Pain Plastes, the only pain-killing and Anti-Pain PLASTER, the only pain-killing plaster.

The Poultry Hard.

Poultry Houses.

As the genial days of spring approach and we listen again with delight to the familiar outdoor sounds, the cackle of laying hens and crow of exuberant cocks are among the most agreeable that greet our ears. And the unwonted abundance of new-laid eggs is apt to awaken fresh enthusiasm in regard to the poultry. Many a flock has been repeatedly promised during the cold weather that better quarters would be provided for them before another winter. Now the milder season, offering unparalleled opportunities for the fulfilment of such promises, will, I think, be a fitting time for my promised chapter on the subject.

The work, whether it be repairing the old or building a new poultry house, should be done as early as possible, for if left till absolutely needed, or rather till next fall, the work may prove longer than anticipated, or possibly be hindered by some unexpected interruption, till the poultry suffer from exposure for want of it, and are rendered unfit for creditable work all winter.

I do not propose to give a definite plan which must be adhered to in every detail to produce an ideal home for the fowls; but to give some general hints that by personal observation I am convinced will be useful to any builder of poultry houses not already versed on the subject.

An architect, however skilled, would hardly undertake to plan a building without first looking over the proposed site, and considering its surroundings. So, in arranging for any building, especially about the home, one should select his location, study its advantages, and plan to make the most of them; discern its disadvantages and contrive to overcome them as much as possible. This done he may proceed with his plan, expecting to be able to carry it out successfully.

The first and most important requisites of the fowl dormitory are warmth, light and ventilation. The sides, after sheeting, should be closely covered with building paper in the same manner as a dwelling-house. The outside covering may be clapboards, novelty siding, or any substantial covering best suiting the means and convenience of the builder, but tightness is the main object, and the expense required to secure it will be paid over and over again by the increased profit from the fowls. In cold climates the poultry house should be lathed and plastered inside, as this will add greatly to the warmth. To prevent the hens picking off the plaster, one-third part cement and two-thirds ordinary mortar may be mixed for the last coat as far up as the fowls can

The roof is in no sense a subordinate part of the structure, and should be made water-tight of course, and as nearly air-tight as may be. The inside plastering should also extend over the top. If there is to be no loft, let the plastering follow up inside the roof, nailing the lath to the rafters. Should it be thought desirable for any reason employ artificial heat, a cellar or Lung, Backache, Kidney Pains, Rheumatism, and all Muscular Pains, relieved in one minute by to employ artificial heat, a cellar or heater is the easiest and best arrangement, as the rising heat will warm the floor and lower part of the room, at the lower floor and lower part of the room, at the same time keeping a very uniform temperature.

The old methed of making a whole side of glass is rather objectionable, as it makes the room colder at night. Large windows on the sunny side, enough to make the room pleasantly light, are best. Let them come low

down, within fifteen inches of the floor, so that the sunshine will pour in where the fowls can get the benefit of it. Sunlight is nature's grand disinfectant, and is not to be despised by any of nature's subjects. Notice how the fowls crowd to bask in it, and you will see that they appreciate its value.

There are so many good ways for ventilating that I will give only the desir able points without describing any The main object is to get a circulation of air from the outside in and cut again, without creating a strong draft to strike the fowl. Cold weather, when the building is closed, is the time when most care is needed. At this time the air inside is warmer than outside, and naturally rises, therefore a means of escape may be provided from the upper part of the building, while to counterbalance or supply its place cold air will readily flow in lower down. Direct openings will cause too strong drafts, and should not be made. Neither are they necessary, as a current of air will wind about considerably to get out or in, and it loses force as it winds. Remember, also, that a large quantity of air will get through a small aperture.

Now, for convenience, study all the time to make the routine work of caring for the fowls as easy and expeditious as possible, for this comes every day, while the work of building is done once to last for years. There may be an alley in the middle or at one side, where the attendant can pass through and perform some of his duties without going into the pens where the fowls are kept. Feeding troughs and water tanks can be arranged to be drawn out into this alley to be filled and replaced, thus saying the annoyance of having a dozen hungry biddies on the back of the feeder, and as many more on the trough, before any food can reach it.

The nests also may be placed along beside the alley, provided with little doors through which to gather the eggs. This last feature, however, is not the most essential, and I would not be understood by mentioning these conveniences to favor keeping the poultry at a distance or allowing them to be strangers. Go among them often, keep them tame, as you would a dog or cat, by petting. Teach them to have confidence in you, and get all the pleasure you can from their company.

Select a warm place away from the windows for roosts, and have an inclined platform under them to catch the droppings. From this the manure can be scraped often into a box and emptied, as it will be very quickly and neatly done. When so arranged, the house can be kept clean with very little trouble, and the valuable fertilizer saved in its best condition. Provide ample runs, and let them communicate by means of small doors, through which the fowls may go in and out at will in mild weather, and which can be securely closed when desired .- George H. Northup, in American Cultivator.





"The Old Oaken Bucket, The Iron-bound Bucket The Moss-covered Bucket."

is very likely the one that has conveyed poisons to your system from some old well, whose waters have become contaminated from sewers, vaults, or percolations from the soil. To eradicate these poisons from the system and save yourself a spell of malarial, typhoid or bilious fever, and to keep the liver, kidneys and lungs in a healthy and vigorous condition, use Dr. Pierce's Golden Medical Discovery. It arouses all the excretory organs into activity, thereby cleansing and purifying the system, freeing it from all manner of blood-poisons, no matter from what source they have arisen. All diseases originating from a torpid or deranged liver, or from impure blood, yield to its wonderful curative properties. Salt-rheum, Tetter, Eczema, Erysipelas, Scrofulous Sores and Swellings, Enlarged Glands and Tumors disappear under its use.

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The Beterinarian.

[This department of the Kansas Farmer is in charge of Dr. F. H. Armstrong, V.S., Topeka, a graduate of Toronte Veterinary college, who will answer all inquiries addressed to the Kansas Farmer concerning diseases or accidents to horses and cattle. For this there is no charge. Persons wishing to address him privately by mail on professional business will please enclose one dollar, to insure attention. Address F. H. Armstrong, V.S., No. 114 Fifth St. West, Topeka, Kas.]

INDIGESTION -D. E. Winters, Haviland, kansas.—Diseases of the digestive organs are generally errors of feeding. Horses are best kept in health and in a working condition when fed upon an admixture of food requiring thorough mastication. Some of the various causes for this trouble are, improper food, overfeeding, bulky dry food, poor in quality, highly stimulating food, after a time induces digestive trouble. Greedy feeders, irregular and imperfect teeth rendering mastication imperfect. Corn and millet are strong food-stuffs and would judge that you were feeding rather too freely of such. Make a change in your feeding. Feed oats, with an occasional barn mash, or pick at grass, to keep bowels regulated. Give the following physic ball: Pulyerized Barbadoes aloes, four drachms; calomel, one drachm; powered nux vomica, one drachm; powdered ginger root, two drachms. Mix make ball and give. Chill the water and give soft feed for two days. After physic has operated, give the following powders: Bicarbonate of soda, eight ounces; powdered nux vomica, one drachni; powdered ginger root, two drachms. Mix, make eight powders. Give one every night in soft feed.

W. C. Coleman.-Could not the redress of skin from hip to hock be due to your applications whatever they were. We are in no better a position to advise you than before. The mere fact that the animal is lame is not sufficient. At this time we would think you could detect some shrinkage of muscles, some swelling of joints, or some location where heat and tenderness could be de-

J. W. Tipton.—It is probable that something foreign to the parts still exists in the wound. It may be a particle of splinter or diseased tissue. However, it is possible that the sinus or sac formed is sufficient to keep parts irritated and discharging, if drainage is not perfect. Would do nothing with her until after foaling. Get some one skilled in use of surgical instruments to ascertain its depth to a certainty, and then open freely until direct drainage is obtained. Search for a foreign body. Inject some of following: Corrosive sublimate, 2 drachms; spirits of wine, 2 ounces; water, 4 ounces. Inject three times at intervals of three days. After which, use following lotion in cut: Chloride of zinc, 1 drachm; water, 1 pint. Inject daily.

I will mail a valuable present to any minister, teacher or friend of education on receipt of address. Thos. J. BRYANT, St. Joseph, Mo.

Consumption Surely Cured.

To the Editor:-Please inform your read ers that I have a positive remedy for Consumption. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. Address. Respectfully, T. A. SLOCUM, M. C., 181 Pearl St., N. Y.

Oatarrh Cared.

A clergyman, after years of suffering from that loathsome disease, Catarrh, and vainly trying every known remedy, at last found a recipe which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self-addressed stamped envelope to Prof. J. A. Lawrence 88 Warren St., New York city, will receive the recipe free of charge.

OKLAHOMA -- THE PROMISED LAND.

"On to Oklahema!" is now the watchword of the thousands of home-seekers who have anxiously awaited the President's proclamation opening this yest and rich country to public settlement. Colonies are being formed in every State and Territory in the Union. The millions of acres may not furnish a homestead for all who come, but there will be thousands ready to relinquish their claims at a nominal figure. The intending settler should look the country over. Go via the GREAT ROCK ISLAND ROUTE, popularly known as the "People's Favorite" wherever it runs. Kingfisher, the U.S. Land Office for Oklahoma, is the coming metropolis of the Indian Territory, and is located on the ROCK ISLAND ROUTE. A fast line of stages has been put on to Fort Rene, to connect with the trains of the Rock Island Territorial extension. This is the cheapest and best route and direct to the place you want to go. Through solid vestibule trains from Chicago via Kansas City and St. Joseph, also from Denver, Colorado Springs and Pueblo to the Territory, through the cities of Topeka, Hutchinson, Wichita, Wellington and Caldwell. It will be to your advantage to locate on the People's Favorite railway. Look at the map. The Rock Island has excellent connections from all portions of the Union. For full information concerning Oklahoma, the land laws, and the best way to get into the country, address

JOHN SEBASTIAN, G. T. & P. A. Chicago, Kansas & Nebraska Ry. Rock Island Route, Topeka, Kas.

TO MONTANA, OREGON AND WASH-INGTON.

If you are going West, bear in mind the following facts: The Northern Pacific railroad owns and operates 987 miles, or 57 per cent. of the entire railroad mileage of Montana; spans the Territory with its main line from east to west; is the short line to Helena; the only Pullman and dining car line to Butte, and is the only line that reaches Miles City, Billings. Bozeman, Missoula, the Yellowstene Nationa Park and, in fact, nine-tenths of the cities and points of interest in the Territory.

The Northern Pacific owns and operates 621 miles, or 521 miles, or 56 per cent. of the railroad mileage of Washington, its main line extending from the Idaho line via. Spokane tending from the Idaho line via. Spokane Falls, Cheney, Sprague, Yakima and Ellensburg, through the center of the Territory to Taeoma and Seattle, and from Taeoma to Portland. No other transcontinental through rail line reaches any portlen of Washington Territory. Ten days stop over privileges are given on Northern Pacific second-class tickets at Spokane Falls and all points west, thus affording intending settlers an excellent opportunity to see the entire Territory without incurring the expense of paying local fares from point to point.

the expense of paying local fares from point to point.

The Northern Pacific is the shortest route from St. Paul te Tacoma by 207 miles; to Seattle by 177 miles, and to Portiand by 324 miles—time correspondingly shorter, varying from one to two days, according to destination. No other line from St. Paul or Minneapolis runs through passenger cars of any kind into Idaho, Oregon or Washington.

In addition to being the only rail line to Spokene Falls, Tacoma and Seattle, the Northern Pacific reaches all the principal points in northern Minnesota and Dakota, Montana, Idaho, Oregon and Washington. Bear in mind that the Northern Pacific and Shasta line is the famous scenic route to all points in California.

the famous scenic route to all provides and fornia.

Send for illustrated pamphlets, maps and books giving you valuable information in reference to the country traversed by this great line from St. Paul, Minneapolis, Duluth and Ashland to Portland, Oregon, and Tacoma and Seattle, Washington Territory, and enclose stams for the new 1889 Rand-MoNally County Map of Washington Territory, printed in colors.

colors.
Address your nearest ticket agent, or Chas.
S. Fee, General Passenger and Ticket Agent, St. Paul, Minn.

The "Eli" Once More.

The Burlington Route (Hannibal & St. Joseph R. R.) once more leads all its competitors, in resto ing the fast train service between Kansas City and Chicago. The train so well known a year ago as the "Eli," and so deservedly popular with the traveling public, has once more been put on. It is a solid vestibule train with sleepers, free chair cars and coaches and makes the through run between the two cities in about fourteen hours. Leaving Kansas City in the evening the passenger takes supper on the dining car and arrives in Chicago for breakfast, and vice versa on his return. This is a great saving of time, and the Burlington's actien in restoring this service meets with the hearty approval of all business men and the public generally.—

The Burlington's new St. Louis line increases in popularity every day, and now holds a high place in public favor.

The Burlington runs on this line through Pullman Sleeping Cars of the latest improved design, and Reclining Chair Cars, seats in the latter being free of charge. and makes the through run between the two citie

Reclining Chair Cars, seats in the latter being free of charge.

We should also strongly advise any one going to Omaha, St. Paul, Minneapolis or the Northwest to Caske the daily forenoon train on the K. C., St. J. & C. B. R. R., which has a through Pullman Buffet Sleeping Car from Kansas City to St. Paul and Minneapolis and free Chair Car to Omaha, or take the evening train from Kansas City, which has a through Sleeper and Chair Car to Smaha.

All of the above trains are in every way models of comfort and convenience.

A. C. DAWES,

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Here is the Arab test of a good herse, which every farmer can apply. It is simply to observe your horse when he is drinking Oats.

Receipts. Shipm'ts. Wheat 9,000 91,000 Corn. 139,000 289,000 Oats. 111,000 59,000

out of a brook. If, in bringing down his head, he remains square without bending his limbs, he possesses sterling qualities, and all parts of his body are built symmetrically.

The Union Pacific has added another round to its ladder of popularity by placing a buffet service for its sleeping car patrons in the Pullman sleepers sun on the regular overland trains.

An appetizing lunch which can be enjoyed at leisure in the Pullman buffet sleepers run on the regular overland trains of the Union Pacific is one of the many inducements ffered Pullman sleeping car patrons to take the "Overland Route."

The through vestibuled sleeper of the 'Chicago Vestibuled Limited' now leaves Topeka via the Union Pacific at 2:53 p. m., arriving in Chicago via the Chicage & Alton at 8 a. m. next morning. This train is vestibuled from end to end, and is composed of smoking cars, palace reclining chair cars, Pullman palace buffet sleeping cars and dining car. The only through sleeper between Topeka and St. Louis leaves Topeka via the Union Pacific at 2:53 p. m., arriving in St. Louis at 6:40 a. m. next morning. No other line offers such unusual facilities for comfortable travel or for quick time. Tickets may be obtained of F. A. Lewis, city ticket agent, 525 Kansas Ave., or of J. F. Gwin, at the depot.

The President's Message.

The inaugural address of the Great "Rock Island Route," Chicago, Kansas & Nebraska railway, is to announce that two through vestibule trains run each way between Chicago and Denver, Colorado Springs and Pueblo, via Kansas City and St. Joseph, without change of cars, making close connections west-bound with all trains for Salt Lake, Los Angeles, San Francisco, Portland and other Pacific coast points, and at St. Joseph and Kansas City, east-bound, with all trains for Chicago, St. Louis, and points east, north and south. These royal trains, consisting of Pullman sleeping cars, restful and handsomely-appointed reclining chair cars, and magnificently furnished day coaches, were built expressly for this service by the Pullman Palace Car Co., and are unquestionably the finest ever turned out by this famous establishment. The reclining chair cars are models of elegance and comfort, and are free to all holders of first-class tickets, and a courteous attendant with every car will see to the wants of our patrons. Ask your nearest ticket agent for a ticket via the Great "Rock Island Route," or write to JOHN SEBASTIAN, Gen'l Ticket and Pass. Agent, Topeka, Kas.

THE MARKETS.

[Changing our publication day has affected our market reports for this week. We did not get Monday's report in time, so we give Sat urday's Chicago markets only.]

LIVE STOCK MARKETS.

Chicago.

CATTLE - Receipts 5,000, shipments Market 10c lower. Choice beeves \$4 00a4 35, steers \$3 25a4 00, stockers and feeders \$2 40a 3 70, cows, bulls and mixed \$1 50a3 25, Texas steers \$3 00a3 70.

HOGS-Receipts 7,500, shipments 5,400. Market strong and higher. Mixed, \$4 70a4 90; heavy, \$4 65a4 90; light, \$4 70a4 90; skips, \$3 45a

SHEEP-Receipts 2,000, shipments 500. Market steady. Natives, \$4 25a5 50; Western, cornfed, \$5 00a5 40; lambs, \$4 90a6 15.

PRODUCE MARKETS.

Chicago

Cash quotations were as follows: FLOUR - Quiet and unchanged. Winter wheat patents, \$6 00a6 25; spring wheat patents, \$4 90a4 35; bakers, \$1 75a2 50. T No 2 apring 883/6

spring, 72a78c; No. 2 red, 86%a87c. CORN—No. 2, 34c.

OATS-No. 2, 28%c. RYE-No. 2, 43c. FLAXSEED-No. 1, \$1 54. TIMOTHY-Prime, \$1 28a1 31 PORK-\$11 50a11 55. LARD-\$6 75.

BUTTER-Active. Fancy creamery, 24a25c; choice to fine, 21a23c; fine dairy, 21a23c; good to choice, 15a18c. EGGS—Weak at 10c.

FAVORITE ROUTE EAST.

The Ohio & Mississippi Railway and its connections offer the only direct through Sleeping Car Route from St. Louis to Washington, D. C., having both a morning and evening fast train service, and running Pullman Buffet Sleeping Cars through without change.

The only direct through carline to Baltimore, Philadelphia and New York via Washington.

Train leaving St. Louis, Union Depot, at 8:00 a. m. daily, has Pullman Parior Cars to Cineinnati; connects direct in Union Bepot with Through Pullman Buffet Sleeping Car Lines of the Baltimore & Ohio Railroad for Washington. Baltimore, etc.

This train also connects in Union Depot, Cincinnati, with Express Train on the Chesapeake and Ohio Route, carrying Through Sleeper for Washington.

Train leaving St. Louis, Union Depot, at 8:06 p. m. daily, has Through Pullman Buffet Sleeping Cars from St. Louis via Cincinnati and the Baltimore & Ohio Railroad to Washington and Baltimere. At Baltimore, Pullman Parlor Cars are attached te both trains frem St. Louis, which then run solid through to New York.

Our agents in St. Louis are prepared to furnish lecations in Palace Cars through to New York City,

o New York.
Our agents in St. Louis are prepared to furnish le-ations in Palace Cars through to New York City, and will take pleasure in reserving the same upon population.

application.
Call on agents of connecting lines west, or the following named representatives of this Company, for additional information concerning the route:
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is full of useful information on Woman's Handiwork: Knitting, Crochet-work, Embroidery, Art Needlework, and other household topics of practical character. Bv-ery lady should subserbe for it. Price, 50 cts. a Year. The Dorcas Magazine, 19 Park Place, New York.

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EAT, WEAR OR USE.

WE HAVE NO AGENTS.

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H. R. EAGLE & CO., Farmers' Wholesale Supply House, 68 WABASH AVE., CHICACO.

Stock Notes.

The Cleveland Bay originated in England. It may be a distinct breed and is a distinct breed, even if it is a cross. There is some dispute as to how the breed was created. The color is dark.

A pig that has the snuffles should be removed from the herd and cared for, as the disease is contagious. Put pine tar in the slops and smear both the nose and face with it. A free use of carbolic acid, both externally and internally, should also be made.

An English writer says of the foot of the horse: The hoof is not a mere block of solid matter resembling horn; but indeed is, se to speak, "the patent safe" in which are enlocked the valuables and title deeds of the whole animal as a property. How many horsemen know this; and by borsemen, we mean those who have bred them and worked them? Yet, "gone at the hoof" is a common verdict of condemnation, and a horse is often done at his prime through the carelessness of the shoer, who is very often an apprentice blacksmith who treats that portion of the live animal as if it were but the share of the plow.

Scotchmen are among the closest observ ers and most careful breeeders to be found, and it is said that at the agricultural shows they surpass all other people in the strict attention given to the stallion exhibits. They attend these shows for a double purpose—to see and enjoy and more especially to select popular animals with which to couple their mares the following season. A number of fine stallions shown in Scotland the past fall have their full quota of mares thus engaged at about \$50 a service for this season. The colts thus secured always sell up in the hundreds of dollars in value. Is there any point in this for that very large class of American farmers who always select the stallion that is nearest-provided he

Scratches, grease heel and all similar complications come directly from net taking proper care of the horses' feet and limbs. Farm horses, most especially, are allowed to stand too long after usage with the mud adhering to them. This, though, is no more prevalent than allowing horses to stand in unclean stables, where the manure is perhaps not thrown out more than once a week. The ammonia arising from the fermenting manure is not only injurious to the general health of the animals, but is one of the most prolific causes of grease heel, cracked quarters, etc. The stable should be cleaned at least night and morning, and the horses should not be allowed to stand in their dirt after being used any longer than necessary for the mud and sweat to dry.

550 Horses in One Stable.

OFFICE E. CLEVELAND ST. R. R. CO., CLEVELAND, O., December I, 1886.

LAWRENCE. WILLIAMS & CO., Cleveland, O.—Gents:—In reply to your inquiry as to our opinion of Gombault's Caustic Balsam, we have been using it for three or four years in our stables. Have now 550 horses, and have probably treated nearly or quite 100 in the past year, using it for all kinds of leg or shoulder lamen-ss, strains, diphtheria, pink-eye, etc, and must say that for any case where blistering is necessary we find it to be JUST WHAT WE NEED and to do what you claim for it, and a PERFECTLY SAFE REMEDY TO USE. We could not well do without it, and can freely recommend it to horsemen. EDWIN DUTY,

Superintendent.

We would add that the above company have

We would add that the above company have used over six dezen bottles in the past year, which fact speaks plainly for itself.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty te make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all whe desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W.A.Noyzs, 160 Power's Block, Rochester, N.Y.

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Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought.

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SEED SWEET POTATOES = 3,000 bushels, eight best varieties—first-class—for sale.
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Cherry Trees and Small Fruit Plants a specialty.

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Send for prices.

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JEWEI Grape known. Equal to the
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Cherry Trees, 10 cents; per 100, \$7. Cabbage, Tomato and Sweet Potato Plants, now ready, \$2 per 1,000.
Celery, ready May 1—all leading varieties, \$2 per
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Strawberries, \$2 per 1 000. Plants by mail or express,
BONNER SPRINGS NURSERIES,
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BEST HOME-GROWN TREES. Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plates. Water-proof. Samples by mail, 10 cents each; #8 per A. H. GRIESA, Drawer 28, Lawrence, Kas

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Established 1865. 460 Acres. Full line of Nursery Stock. Forest Seedlings for Timber Claims and Apple Trees for Commercial Orchards a specialty. Large Premium for planting forest trees in spring of 1889. Treatise on cost and profit of apple orchard, free on application. Good salesmen wanted

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FOREST TREE SEEDLINGS—all kinds, Fruit Trees and Plants, Mammeth Dewberry; Black Walnuts, \$1 per barrel. Lowest prices, largest stock! Write for free Price Lists.

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Ornamental, Shade and Evergreen Trees ever offered
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Dealers and planters can depend on it. Orders packed
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ONE HUNDRED THOUSAND TWO-YEAR
APPLE TREES - Grown from whole root
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Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address

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Owing to the hard times, I have decided to cut the prices of FIRE-DRIED SEED CORN, and in order to secure these low prices you must cut this ad. out or mention Kansas Farmer when you order.

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King of the Earliest Corn—Peck, 50 cts.; bushel, \$1.20; two bushels, \$2.00.

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12 Large White Double TUBEROSE, 3 CANNAS -- Mixed Colors, 3 GLADIOLA -- Mixed Colo By mail, postpaid, for 50 cents.

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EDS THAT VEGETABLE GAROW DEN, FLOWER GARDEN, GRAIN AND GRASS SEEDS 49 FRESH AND PURE. TO

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The Busy Bee.

Bees During Mild Winters.

Bees during a mild winter, like the present, consume more honey than in a cold one. When they are often put upon the wing exercising, they require more food than during a cold winter when they are in a semi-dormant state. Bees store their pollen, or bee-bread, in the base of the cells, and fill up with honey. When they have consumed the honey, they will rear brood in the center of the cluster, the nurse-bees eating the bread so as to give milk to the young, or, in other words, feeding it to the young half-digested, as the pigeons feed their young. These little patches of brood in the center are a wise provision of nature against the loss of the quien, for as long as they have eggs or larvæ not even three days old, they can raise another queen or mother bee.

As the drain upon the bees' stores have been excessive, owing to the mild weather and consequent activity of the bees, the owners of colonies, whether few or many, should not let them starve. If he does, he loses not only the bees but all the honey they had in the fall. Bees consume their stores very rapidly in the spring while rearing their young, for scientists tell us that insects during their larval state consume more food than during the remainder of their lives.

FEEDING BEES.

Honey is their natural food, and nothing else is to be resorted to when it is to be had. Large apiaries usually have in store dark honey that is not salable, and broken or partly-filled comb, which can be utilized in this way. I have a few two-pound sections, in which the queen laid and drones were reared, discoloring them, rendering them unfit for food, and these I shall use as feed for bees, turning them down over the cluster.

I do not advise feeding bees in early spring, except to prevent starvation, for it arouses them to activity and they will try to raise more brood than they can hover; and let the weather turn suddenly cold, contracting the cluster, and much of it will perish. More young bees will be reared by feeding, but it will be at the risk of the lives of the old bees, for it is a severe draught on their vitality, preparing their food; they also fly out for water on chilly days and perish. When a bee loads up with cold water he gets numb, and cannot return home. If the old bees die off faster than the young ones are able to take their places, the colony must ultimately perish.

GOOD CANDY.

This was the invention of a prominent bee-keeper, whose name it bears, and is made as follows: Heat liquid honey until hot, but not up to the boiling-point, and stir in confectioners' sugar until it will absorb no more, when it can be made into cakes with the hands. This candy will not be sticky, yet keep soft and moist, so that bees can feed from it. A cake of this candy should be slipped down into the cluster and save a colony from starvation, and yet not arouse them to undue activity, as the feeding of liquid honey or sirup will do.

SIRUP.

This should be used only as a forlorn hope, when the bees' natural food is not to be had, for a laborer is worthy of his hire, whether a bee or a human being. It is not particular what kind of sugar is used for making sirup in the spring, when bees can fly every few days; but, in fall, nothing but the very choicest will answer. I generally pour

CHICAGO.

KANSAS CITY.

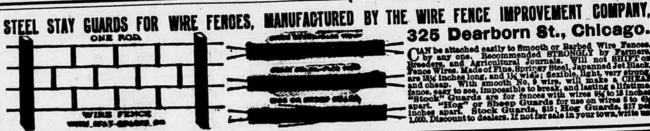
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325 Dearborn St., Chicago.

boiling water upon sugar in a pitcher, and stir it up with a spoon, making a thin sirup which I feed warm. The undissolved sugar will settle in the bot-tom and should be allowed to settle, for it will harden in the feeders and be-come bothersome.

FEEDERS.

I have many different kinds, and use them according to time place and condition. If I desire to feed liquid honey or sirup when it is cool weather, and am desirous of keeping all the warmth possible in the cluster, a one-pint Mason jar, with a perferated cover, answers the purpose admirably, as it can be turned over a small hole, and the bees take it through the perforations. I have tried the quart jars in the same way, but the result was not satisfactory in my hands, for the sirup came down faster than the bees could take it, and it would run from the hive and be wasted. It needs to be set perfectly level, and then it will not run out.

Wooden vessels answer the purpose much better for feeders, than those having a smooth surface, like tin, glass or earthenware. If a tin or glass vesor earthenware. If a tin or glass or earthenware. If a tin or glass vessel should be filled with liquid honey or sirup, and be accessible to bees, in a very short time they would be a writhing, struggling, drowning mass; while, if the same quantity were in a wooden vessel. Every bee would get out. Bees appear to be able to take a grip on wood, which they cannot do on other surfaces. Some wooden bowls, or butter-dishes, if they do not leak, make good feeders. I once showed to a bee-keeper a feeder that was cut of wood by a wabbling saw. He said that it would get full of drowning bees. He was mistaken, however, for I filled it immediately with sirup, put it over a strong colony, and in a very short time it was clean and dry without a dead bee. Any sort of a vessel can be used, if it is filled with chopped straw or shavings.—Prairie chopped straw or shavings .- Prairie Farmer.

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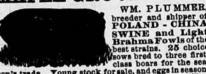
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POLAND - CHINA
SWINE and Light
Brahma Fowls of the
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I have 100 Pigs for sale, sired by such noted bears as Gov. Cleveland 4529, Royalty 6469, John 690, King Klever 2d 1309, and other equally noted sires. I can supply very choice pigs. Write for prices or call and see stock.

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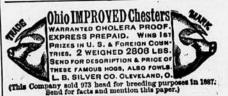
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Terms favorable and prices low. Will trade for steers. Farm two and a half miles nor heast of town and 100 miles west of Topeka on Santa Fe railroad. Write for particulars to MAKIN BROS., Florence, Marion Co., Kas.

MORGAN HORSES Western ters for Stallions of high breeding, and Grade Dr. A. W. HINMAN, Dundee, Ill.



ZETA, Sire, imported Billet by Volti-ger. Dam, Ve-qus by Hurri-cane, he by imported Bei-shazzar. We is a beautiful

ZETA has the size, style, action, speed, endurance, beauty and disposition to sire Ceach, Saddle, Driving or General-Purpose horses of the best class.

Terms: -si5 for the season; \$25 to insure. Further informatt n upon application to SEXTON, WARREN & OFFORD, Maple Hill, Kas.

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GOOD HORSES, LONG TIME, LOW INTEREST, MODERATE PRICES. No other firm in America sells to stock companies under the same perfected system that we do, which insures to companies square dealing, successful breeders and absolute success. Illustrated catalogue free.

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I have a choice herd of these justly-cele-brated cattle of all ages. Also some nice grades, for sale at reasonable prices. Per sonal inspection invited. Call on or address

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NERVOUS, CHRONIC and PRIVATE DISEASES of MEN and WOMEN successfully treated.

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Suffering from the effects of youthful follies or indiscretions, or are troubled with Weakness, or indiscretions, or are troubled with workness, Nervous debility, Loss of Memory, Despondency, Aversion to Society, Kidney Troubles or any dis-eases of the Genito-Urinary Organs, can here find a safe and speedy cure. Charges reasonable, especially to the poor.

MIDDLE-AGED MEN,

There are many troubled with too frequent evacuations of the bladder, often accompanied by a evacuations of the bladder, often accompanied by a slight smarting or burning sensation, and weakening of the system in a manner the patient cannot account for. On examining the urinary deposits a ropy sediment will often be found, and sometimes small particles of albumen will appear or the color be of a thin milkish hue, again changing to a dark or torpid appearance. There are many men who die of this difficulty, ignorant of the cause, which is the second stage of seminal weakness. The doctor will guarantee a perfect cure in all such cases, and a hesithy restoration of the genito-urinary organs. Consultation free. Send 2-cent stamp for "Young Man's or Guide to Wedlick." Friend, or Guide to Wedlock."
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OPIUM Morphine Habit Cured in 10 to 20 days. No pay till cured. Dr. J. Stephens, Lebanon, Ohio.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

POSTING.

PY AN ACT of the Legislature, approved February
27, 1866, section 1, when the appraised value of a
stray or strays exceeds tea dollars, the County Clerk
is required, withis ten days after receiving a certified
description and appraisement, to forward by mail,
notice containing complete description of said stray,
the day on which they were taken up, their appraised
value, and the name and residence of the taker-up, to
the Kansas Fammen, together with the sum of fifty
cents for each animal centained in said notice.
And such notice shall be published in the FARMER
in three successive issues of the paper. It is made the
duty of the proprietors of the Kansas Famer to send
the paper, free of cost, to every County Clerk in the
State, te be kept on file in this office for the inspection
of all persons interested in strays. A penalty of from
6.00 to 800 0 is saffaed to any failure of a Justice of
the Feace, a County Clerk, or the proprietors of the
Fammer for a violation of this law.

Breken animals can be taken up at any time in the

Breken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the first day of April, except when found in the lawful enclosure of April, except when found in the lawful enclosure of the taker-sp.

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

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

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township giving a correct description of each stray, and he must at the same time deliver a copy of said notice to the County Clerk of his county, who shall post the same on a bill-board in his office thirty days.

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

The Justice of the Peace shall within twenty days from the time such stray was taken up (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray.

Stray.

If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in

If such stray shall be valued at more than ten doing, it shall be advertised in the Kansas Farmer in three successive numbers.

The owner of any stray may, within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the ceunty, having first notified the taker-up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

of the Justice, and upon the payment of all charges and costs.

It so were of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

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

They shall also de'ermine the cost of keeping, and the benefits the taker-up may have had, and report the same on their appraiseme t.

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

Any person who shall sell or dispose of a stray, or

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

FOR WEEK ENDING APRIL 4, 1889.

Chase county-J. S. Stanley, clerk.

STEER-Taken up by Matti Bros., in Toledo tp., P. O Cottonwood Falls, March 11, 1889, ene red and white yearling steer, hole in left ear; valued at \$13. Leavenworth county-J. W. Niehaus, clerk COW-Taken up by William Dister, in Leavenworth tp., March 8, 1889, one roan cow with red neck and head, bob tail, 10 years old; valued at \$15.

Shawnee county-D. N. Burdge, clerk. MARE—Taken up by J. W. Wilson, P. O. Topeka, near bridge on Kansas avenue, March 9, 1889, one dap-ple bay mare, 9 years old, no brands, lame in fore and hind feet; valued at \$20.

Douglas county-M. D. Greenlee, clerk. STEER—Taken up by Wm. G. Stevenson, in Clinton tp., March 15, 1889, one yellow Texas steer, 3 years old, no marks; valued at \$10.

STEER—By same, one deep red Texas steer, 3 years old, no marks; valued at \$10.

FOR WEEK ENDING APRIL 11, 1889.

Greenwood county—J.W. Kenner, clerk. STEER—Taken up by J. W. Davidson, in Bachelor tp., March 6, 1889, one red yearling steer, white on back and in foreboad; valued at \$15.

Cowley county-S. J. Smock, clerk. PONY—Taken up by J. E. Campbell, P. O. Torrance, February 20, 1889, one dark bay male pony, ancher on left flank and bar below; valued at \$15. PONY—By same, one light bay male pony, pitch fork brand on left hip; valued at \$15.

Chase county-J. S. Stanley, clerk. HEIFER—Taken up by John C. Denby, in Bazaar tp., P. O. Birley, March 11, 1889, one yearling roan heifer with red neck, branded 1R on right hip; valued

HEIFER—By same, one yearling red and white heifer, branded iR on right hip; valued at \$14.

HEIFER—Taken up by W. N. Oles, in Bazaar tp., P. O. Bazaar, March 30, 1889, one three-year-old red and white heifer, under bit in each ear; valued at \$12.

Osage county-R. H. McClair, clerk. PONY—Taken up by J. M. Brewer, in Grant tp., March 20, 1889, one bay pony mare, about \$ years old, hind feet white, a small bunch on right fore leg, white spot in face between eyes.

Labette county-W. J. Millikin, clerk.

MARE—Taken up by L. Metzen, in Elm Grove tp., March 21, 1889, one light brown mare, white forehead, three white feet, branded C on left shoulder.

FOR WEEK ENDING APRIL 18, 1889. Decatur county-R. W. Finley, clerk.

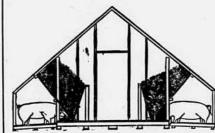
COLT—Taken up by E. Wilson, in Lyon tp., March 8, 1889, one sorrel horse colt, 3 years old, thirteen hands high, no marks or brands; valued at \$40.

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HOLSTEIN BULL CALVES AT LOW PRICES if taken soon. Echo, Aegis, Aaggie and Nether land families. M. S. Babcock, Nortonville, Kas.

The Hog Sanitarium



For Saving Feed and Work and Protect ing Hogs from Disease.

For Saving Feed and Work and Protecting Hogs from Disease.

A Granary and Automatic Feeder Combined, to be erected in the Feed Yard. Will store 900 bushels of corn; feed 160 head of hogs. Any farmer can build it.

For feeding laxative and nitrogenous food, such as Bran, Ground Rye, Ground Oil Cake, Shorts, etc., with Corn, shelled or ground, dry, and without waste; also for feeding saltat all times, thoroughly mixed through the feed. Warranted, when properly used, to save at least 20 per cent. of the feed as usually fed. Not by the direct saving alone, but mostly by reason of increased thrift and rapid and even fattening. Will require for construction about 2,000 feet of lumber and 3,000 shingles for feeder of regulation size. Can be built of less capacity and added to at any time to suit the farmer's needs.

The use of this feeder with a proper supply of nitrogenous and laxative food with corn, will in two weeks' time place the mest unthrifty hogs in good condition, if not already infected with cholera. Sanitarium hogs eat regularly and often; never overeat. No mud or flith to consume; all work and waste practically dispensed with.

The use of shelled corn or meal in the Sanitarium is not half the trouble it is to feed ear corn. Keeps the yard free from litter; gives all hogs in the yard the same chance to thrive, all having equal access to feeder. When you see your corn trampled in the mud and filth you feel like kicking yourself. When you witness hoge eating from the Sanitarium in a muddy time you smile; so do the hogs. You do not hesitate to provide for the comfort of other farm animals; why neglect the hog? He brings a quicker and better return for money invested than any other animal. Protect his health and feed him properly and he will be more remunerative to you. I farnish Permit with full instructions about building and operating Sanitarium on one quarter section or less tract of land, for \$10.00 To introduce it. I will furnish same to first applicant in a township for 25 cents (in stamps), which merel

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570 acres; 376 acres cleared, 200 acres timber; fenced, well watered, large house, three tenant houses, barn and other buildings. Soil variable, suitable for any crops or stock farm. Delightful climate; good peach district. Low price, part cash, balance is easy payments. Further particulars address WM. D. PYLES, Deputy Sheriff, Camp Springs, Prince George Co., Md.

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Years ago I invented and used on my own herd a "Horn-Killer" — something "Horn-Killer"— something to stop the growth of the young horn. I have now perfected it, and am prepared to give it to the pablic. Prices. 100 head of imported and home-bred Holsteln-Frieslan Cattle of all ages. Young stock bred from the same, of large milking families and of good individual merit. Also a fine lot of grade Holstein Heif-ers from Thoroughbred Short-horn Cows.

90 Mares and Colts 90

These Mares are all well graded, ranging from 1150 to 1500, all stimed to the imported Percheron St-lilon Murat (2014); also a fine lot of colts and filles from the above horse. I will close these out for cash. Correspondence promptly answered. For particulars address T. G. HINDS, Kingman, Kas.

For Sale or Exchange I.

T. W. ANDREWS,

ROSSVILLE, KAS., Owner of the right for Shawnee and Wa-baunsee counties and agent for E. P. C. Web-

IS PREPARED TO DEMORN CATTLE by the use of the Webster chute, in the above counties, in the best and easiest possible way. Address him.

A GRAND PUBLIC SALE OF Herefords and Short-horns!

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LINCOLN, NEBRASKA, FRIDAY, MAY 10, '89.

This sale will include about twenty-five head of Herefords from the famous prize-winning EARLY DAWN HERD, in which the blood of LORD WILTON, MERRY MONARCH, HORACE, ANXIETY, SUCCESS, and other noted Hereford sires will be represented. The Early Dawn Herd, with the great Anxiety bulls Beau Real and Beau Mone at its head has acquired a reputation second to none in America, and the mere announcement that the get of these bulls is catalogued and that a number of the females are in calf to Beau Real, the greatest living Hereford show bull and sire is swificient. These cattle will be sent out in good breeding cerdition, and both bulls and helfers switable for show yard will be offered.

The twenty-five Short-horns will consist of imported females from the herds of the Duke of Northumberland and John Angus, together with their progeny, got by Cruick-hank bulls, and a number of representatives of American tribes, such as Rose of Sharon, Rosemary, lanthe and Goodness (Bedfords). Upon such such bulls have been use I as 8th Duke of Thorndale, Golden Drop's Hillhurst, and well-bred Rose of Sharon and young Marys.

young Marys.
No better offering of these breeds has ever been made in the West.
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If the stock on my farm at Kingman, Kansas, is not sold in a body, by May 1st, 1889, I shall be prepared to dispose of the same in large or small lots, at low prices. 100 head of imported and home-bred Hoistely-Friesian Cattle of all ages. Young stock bred from the same, of large milking families and of good individual merit. Also a fine lot of grade Hoistein Heifers from Thoroughbred Short-horn Cows.

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An A 1 thirty-room three-story hotel, controling the trade in the best manufacturing town in northern Illinois. Rents to pay 12 per cent. en its value of \$7,500, and can be run by purchaser to net \$2,000 per annum. Would take good land in part payment. Address for full particulars, SANDWICH MFG. CO., KANSAS CITY, MO.

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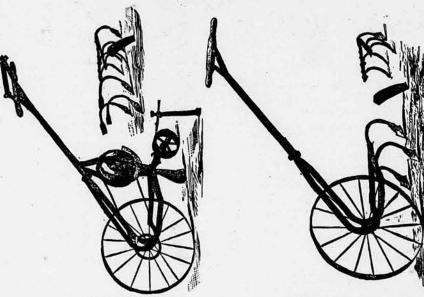
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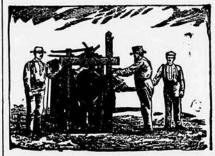
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And Wheel Hoes (combined or single), improved for 1899. Circulars
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Stock next autumn.

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