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### ECONOMIZING LABOR.

*Kansas Farmer:*

Any system of rotation that will enable us to do at least the largest part of our work will of course, as a rule, increase our profits. On many farms, there is a great rush of work; extra hands are hired, extra help secured in the kitchen, all the teams on the farm rigged up and the worked is pushed along as rapidly as possible. Why? because the work is pressing. At other times, work becomes slack, and there is but little if anything to be done. Generally this extra help is required just at a time when the cost will be the greatest, that is, when the price of labor is the highest, because it is in the most demand. If we can so divide the work or raise a sufficient number of crops so that if help is needed it can be kept to an advantage all the year around, two men and one team or four men and two teams can work to a good advantage. The amount of help needed must depend upon the work you can do yourself or with your family. Take the rotations followed at the Missouri State Agritural College, of corn, oats, clover, wheat, timothy. You have, say eighty acres of land; you want a small pasture, orchard, garden truck and small fruit patch, yard, etc. This will take, say twenty acres, leaving you sixty acres for cultivation, or six fields of ten acres each. The ground should of course be plowed for spring crops in the fall; the more this is tried the better satisfaction it gives. With the land plowed for spring crops, we are ready to begin as soon as the spring opens. One good team and two good men should do the work or nearly all of it. By hiring by the year we get good help at the lowest price, and reliable help at all times. Not having a large acreage to seed, you are able to get them at the right time, and to have the soil in first-class condition. Early sown oats and clover to a considerable extent, are nearly always the best, and it pays to have the work arranged so as to sow them at the first favorable opportunity in the spring. There is plenty of time then to plant your early potatoes. In the early garden, clean up and get everything ready for corn planting. As with oats, there is a best time for planting this crop, and the nearer the seed is planted to this, the better germinating and growth will be secured. This, I consider, is just after the soil becomes sufficiently dry and warm to induce a good germination of the seed. By being all ready it requires but a short time to put in the crop, and it can be put in with everything in a first class condition. This insures a good stand. You can have your land clean, and can therefore plant in drills, and a larger crop and a better growth be secured, because you have had time to properly prepare. Then, not having your work press you, there is time to cultivate your garden and truck patch, and commence the cultivation of your corn. It is the early cultivation that makes the corn crop, and you will be able to give thorough continued cultivation. With your acreage you can keep clean and do all the work. Keeping clean implies keeping the soil mellow and stirred, so that a good growth is secured and at the same time, be able to do all the work necessary to be done. By being able to plant at the right time and give thorough cultivation at the start, a growth will be secured that will enable you to secure such a growth and with that when your clover is ready to cut, the corn, garden and truck

patch can be left to take care of themselves. As with the oats and corn, being up with your work, you are able to cut your clover at the right stage, so as to secure in the best manner. This is always an object, to be able to do your work at the right time and have it completed in good time.

After your clover is cut and stored away, another working can be given the corn and other cultivated crops. Then the wheat is ready to cut and shock up. It can be cut just when the seed is beginning to harden, so that the heaviest, plumpest and brightest grain will be secured. The straw is in a good condition for making good feed.

The wheat out of the way, ordinarily the hay will be the next crop that will need attention. We all know that the nearer hay can be cut at the right stage, the better will be the quality. If you cut too early, you secure too much water that in curing will dry out, and you will fail to receive the yield you should. If you defer the cutting too late, you secure too large an amount of woody fibre, that is a loss of nutriment. Hence, experience has shown us that between these two stages is the best time to secure the best quality of feed. When the largest per cent. of the seed begins to harden is the best time; and here again your system of labor comes to your aid, the hay can be cut and cured at the stage when the best quality of seed will be secured.

After the hay is secured, oats will be ripe; they should be cut when not too ripe, as the value of the straw will be lessened. Oats allowed to become too ripe, not only waste in handling, but the straw is of considerably less value for feed. Not having a large acreage in any one crop they are easily got out of the way.

You can now plow your wheat ground, which should be done early. You have time then to take a rest; haul out manure, fill up your corn crib, wheat and oat bin; clean up and get ready for fall work.

Your second crop of clover, from which you can secure your crop of seed can be cut next. Your corn cut up and shocked, because if you are intending to make the most from any system of rotation, it is necessary to save everything that will make feed and feed it out on the farm. Then the wheat should be sown. This should be done the latter part of September; you have time to prepare in a good condition and sow at the proper time. I find that with all kinds of crops it pays to take time, have the soil thoroughly prepared in good condition and have everything in readiness to plant or sow at the right time. After the wheat is sown, fall plowing can be done, the corn gathered and stored away, the wheat and oats threshed, the fodder hauled up and stored away, and everything arranged for winter feeding. There are plenty of other little jobs to be done, such as digging and storing the cabbage and other garden crops, gathering the fruit, pruning, setting out, attending to the orchard, hauling out manure, making and repairing fences and doing such work, improving the farm as may be necessary.

You can always save time by doing everything thoroughly, and by having a system of work and a rotation of crops, one following the other and plenty of time to do everything as it should be done and at the right time. During the winter wood can be secured, the stock fed and watered regularly, and manure hauled out whenever it can be done. On many farms, no help whatever will be required, the farmer and his boys

can do all the work. Prof. Sanborn, of the State Agricultural College claims that with 170 acres in the farm, they seeded down 60 acres to pasturage and cultivate 110 or six fields of about eighteen acres each. And with four men and two teams they find plenty to do, and have increased the yield by building up the fertility, so that last year they were able to secure a yield of eighty bushels of corn per acre, sixty of oats, and thirty of wheat, four tons of clover hay, and three of timothy.

They feed out to thrifty growing stock, everything that is raised upon this farm, taking pains to feed so as to secure the largest gain possible for the smallest cost, and make, save and apply all the manure possible. The plan is simple and practical; any farmer can follow it, and as I said before, with many farmers, by following such a system they can do all the work themselves. No extra help would be required at no time during the year if we except threshing.

### Trimming Hedges.

*Kansas Farmer:*

While it is true that the snow drifts on the roads, especially those running east and west where there are high hedges on both sides of the road, it is also true that the snow drifts just as bad where the hedges are kept about four feet high; but those are not so suffocating hot in summer as the others are. I don't know if any of my neighbors have got pay for land where the road is. I am sure I never got any, and consequently, according to Mr. Snyder, I have a right to raise a line of hedge on my side of it. But this line of hedge ought not to be suffocating to travelers in summer nor a place for snow to drift in winter; therefore, I propose to cut out about three-fourths of it, or better, probably, to cut out all the weaker ones, leaving only the stronger ones stand. If this work is done in the latter part of August, there will be but little work to keep down the sprouts that spring up afterwards. I would cut off all the lower branches, leaving only the tops of those left to stand; then, in order to make a fence of it, I would stretch wires along the hedge lines, using those stems left to stand for posts, and on account of the posts being so close to each other it will be a very strong and safe wire fence. Then I will have a fence that is not an abode for rats and rabbits and other vermin, like some hedge fences are. And, too, that will let the wind through for the benefit of those traveling on the road and those plowing in the field. If the hedge lines along both sides of the road are so treated and the road is kept clean of weeds and grass, then there will be no snow-drifts on that road. The hedge so treated will in time, if allowed to grow big enough, afford shade in hot days to camp or ride under for the relief of campers and fastidious gentlemen. Another great benefit of this mode of trimming is, when this work once is done, there need be no trimming once or twice a year to keep the fence about four feet high. The hedge lines can be left to themselves then to grow as big as they have a mind to. Possibly once in three or four years the lower branches next the road need to be cut off some.

SVEN THOMPSON.

McPherson, Kas.

Parsnip seed is worthless when over a year old. It must be fresh.

"CATARRH—The Cause and Cure." Mailed to your address free. Star Publishing Co., St. Louis, Mo.

### That Hedge Law Again.

*Kansas Farmer:*

There are some persons who seem to be possessed with the idea that whenever an evil appears to present itself it should at once be corrected by the strong hand of law. In a free country like ours the controlling idea should be to have as little law as we can well get along with, and then to have the laws that we must have faithfully executed. The more law we have (especially such law as might be dispensed with) the more causes for litigation; and litigation is not conducive to the happiness, good will or prosperity of a community. As an unnecessary law, and one that works unjustly, I must class the proposed law compelling farmers to annually trim their hedges along the roads. It will be especially unwise to have such a law enacted in our State now while the State is new. We should rather encourage the planting of hedges in our State for reasons that I gave in a former article. But such a law would act as a discouraging measure at once.

In the FARMER of February 9 Mr. Snyder advocates such a law. I wish to notice some of his points. In the first place, it is but a small part of the roads in these parts that farmers got paid for the land. I have not received a cent for the two roads on my farm. Many others are in the same fix. Second. The roads go to the fence. The fence belongs to the farm, not to the road. Does Mr. Snyder claim that there is a limit, how deep or how high we own our farms? Or must we raise low crops so as not to obstruct the cooling breezes that fan the traveler? It is true, a big hedge is a wind-break. During a short period of the year this is unpleasant. At other times it is quite agreeable to man and beast. As for snow-drifts, the low hedge is just as bad. We know that from experience here. Repeated trimming makes it thick and tight, and several times the lanes were quite full here. We have few big hedges here. Most farmers lay them down as soon as possible and keep them smooth. Others are a little tardy, but gradually fall into line. Our State is new. We can't expect perfection at once, neither in knowledge or practice, with regard to the proper age of laying down. Our farmers have to work hard to perfect the many things on their farms. They must for a long time suffer many inconveniences that time, industry and perseverance will overcome. The public traveler can afford to hurry past a big hedge in summer and stop to breathe at an open place; and dispense with a law that is likely to do more harm than good, besides being wrong in principle.

Do not understand me to advise any one against the trimming of hedges annually, or semi-annually, or biennially. I think it should be done. But I believe it is not a proper subject for legislation, any more than our farm houses and growing crops. And I am confident that at this age of our State such a law would discourage the planting of hedges, and in the end do more harm than good.

H. F. MELLENBURCH.

Carson, Brown Co.

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and a good assortment of all kinds of nursery products. A large stock of forest tree seedlings cheap. Send for price list, etc. Address, Blair & Kaufman, proprietors Kansas City Nurseries, 100 W. 9th street, Kansas City, Mo.

## The Stock Interest.

### DATES CLAIMED FOR STOCK SALES.

MARCH 15.—Wm. P. Higinbotham, Manhattan, Kas., roadster, trotting-bred and general-purpose horses.  
MAY 17.—Wm. P. Higinbotham, Manhattan, Kas., Short-horn cattle.  
JUNE 30.—A. H. Lackey & Son, Short-horns, Peabody, Kas.

### Stomach Worms in Sheep.

By H. J. Detmers, Veterinarian Ohio Agricultural Experiment Station.

In the following is reported a case of worm disease in sheep, which, I think, will be of some interest to flockmasters:

On September 17, Mr. M. and Mr. G., farmers residing in Franklin county, came to the Veterinary Clinic of the Ohio State University with a very sick lamb, of the Shropshire breed. When they left home the sick lamb was put in the buggy behind the seat, but when they arrived at the University it was found to be dead. Consequently, as Messrs. M. and G. desired to know of what disease the animal had died—Mr. G., the owner, having recently lost quite a number of lambs, which had exhibited the same symptoms—nothing was left to be done but to make a *post mortem* examination, which was done at once. The carcass was yet warm, and in a middling good condition as to flesh; there was considerable fat along the sternum, and the animal, which had been sick for some time, must have been in a very good and thrifty condition before it became diseased; but there was very little blood in the large veins and tissues—the carcass was anæmic. On opening the chest, morbid changes, such as are usually produced by the presence of a considerable number of lung worms, *Strongylus filaria R.*,—small thread-like worms, which inhabit the bronchial tubes of lambs and sheep—but although a very thorough search was made, not a lung worm could be found, not even in the ultimate ramification in the bronchi; hence the worms that caused the existing morbid changes, must have emigrated. This appears the more probable, when the advanced season, September 17, is taken into consideration. The morbid changes, however, a though rather extensive, were not such as could have caused the death of the animal, for more than two-thirds of the pulmonary tissue was yet perfectly healthy. Therefore, as the worms were not present, the animal, if not affected with some other disease, would have lived. The cause of death, not existing in the chest—all other organs in that cavity appearing to be perfectly healthy—had to be looked for somewhere else. The abdominal cavity was next opened. Here the uncommon large size of the fourth stomach, *abomasum*, at once attracted attention. Ligatures were passed around the *duodenum*, and around the connections between the third and fourth stomachs, and the latter with its contents removed and laid aside. This done, all other organs, situated in the abdominal cavity, were subjected to a careful inspection, but nothing was found that possibly could be construed as constituting the cause of death. This ascertained, the fourth stomach which exhibited not only an abnormally large size, but also an uncommonly dark color—the animal had been dead but about half an hour, and no *post mortem* changes were existing—was carefully opened, so as not to allow its semi-fluid contents to flow out. The sight presented was a singular one. The brownish or almost blackish contents appeared to be alive and in motion, and it was found that these consisted of comparatively little fæces, a considerable quantity of dissolved blood and innumerable small, thread-like worms, of a brownish color, known as *Strongylus*

*contortus R.* When some of the contents of the stomach were removed, the immediate cause of death became obvious. Not only a large number of worms were firmly attached to it, with their head imbedded in the mucous membrane, but the latter also nearly everywhere showed innumerable tiny lesions where worms evidently had been attached; hence the blood effusion, and the presence of a large quantity of dissolved and decomposing blood in the stomach. The small lesions or wounds, however, were not limited to the pyloric portion of the mucous membrane, as is usually the case, but were everywhere in the mucous lining of the whole stomach. Quite a number of these worms, which were all alive and wriggling, were separated from the other contents of the stomach, and some of them mounted and photographed with the microscope, an amplification of about sixty diameters being used.

None of these worms are found in the fourth stomach of sheep or lambs until after the middle of June, and the immature worms occur as late as the latter part of September. The worm brood, therefore, must be taken into the alimentary canal of the sheep from June to September, and, as the first mature worms are not found to contain eggs until the latter part of July, or until August, and the last ones probably not later than November, the eggs must be deposited between the first of August and the last of November.

Consequently, the pasture grounds and sheep yards occupied by infected sheep from the first of August to the last of November, must be avoided, the following season, from the latter part of May or the first of June until the first of September. Furthermore, in order to prevent losses, all pastures, fields and yards, which contain low and swampy places, or pools or ditches of stagnant water, must be strictly avoided, if the year before infected sheep have had access, or have been near, on ground that drains into these low places.

Wherever *strongylus contortus* is of frequent occurrence, the lung worm of sheep, *strongylus filaria*, which is somewhat longer than the former, and inhabits the ramifications of the bronchi in the lungs, seems to be no stronger, for both worms frequently occur in the same animal. This, however, is not so peculiar as it may at first appear, as the natural history of both worms is essentially the same; both pass their larvæ or embryonal stage, or a part of it in aquatic animals or plants. *Strongylus filaria* occurs earlier in the season than *strongylus contortus*. In the lamb in question, large numbers of the former, unquestionably, had been present, but had, at the time of death (September 17) already made their exit. The lamb, while sick, had frequent sneezing fits. The principal abiding place of *strongylus filaria* is in the ramifications of the bronchi, but when arrived at maturity and filled with eggs they crawl upward, and thus cause the sheep to cough and to sneeze, and in that way the worms and their brood are ejected.

As to the means of prevention, the same that apply to *strongylus contortus* also apply to the lung worm. Pastures and fields, which have been occupied the year before by sheep infested with lung worms, must next year be avoided by other sheep.

As to medical treatment, something may be done with *Strongylus contortus*, because they can be reached with medicines. There is no doubt that several remedies known as anthelmintics, (worm medicines) as lemon cinæ and lintonin, floru brayeræ anthelminticæ, picronitrate of potash, and several others, will answer the purpose. But

in treating a flock of sheep, the remedy to be used must be a simple one and easy of application, so as to enable it to be administered without much trouble, and in a short time to a large number of animals. Very good success has been obtained with tartar emetic, which is soluble in water, easily administered and cheap. It may be given to lambs and sheep, according to age and size, in doses of from five to fifteen grains dissolved in distilled or rain water. If many sheep are to be treated at once, a solution may be made that contains ten grains of tartar emetic to every ounce of water, and then half an ounce may be given to the younger lambs, two-thirds of an ounce to one ounce to the older or grown lambs, and from one ounce to one and one-half ounces to each old sheep. The medicine, which is easily administered with an ounce vial for the lambs and a two ounce vial for the old sheep, should be given in the morning, before the animals have been fed. After it has been given the sheep should be shut up and be kept away from any food for at least six hours.

As to the lung worms, the task is far more difficult, for they cannot be reached. Fumigations with smoke of burning leather and with a great many other things have been recommended and been used, but the value of such fumigations is, to say the least, doubtful. Benzine and oil of turpentine may be tried in shape of an emulsion, and be given as an internal medicine. If a flockmaster has choice of pasturage, he will do well, if he has wormy sheep, to keep them on high and dry ground, so that the eggs, passed off with the dung, (if *Strongylus contortus*) or the eggs and embryos that are sneezed out (if *S. filaria*) cannot find a suitable place of development and must perish. It is to be supposed that a large majority or most of the eggs will perish anyhow, but if it is taken into consideration that each female worm produces many thousands of eggs, and that there are at least four times as many females as males, there is little danger of the dying out of the brood, even if 999 of every 1,000 eggs should perish.

### Indigestion in Horses.

Horses suffer from mistakes in feeding more than any other farm animals and are consequently more subject to indigestion and its injurious results. Killing by kindness is by no means unusual with horses. The alimentary and digestive organs and their functions in horses are somewhat peculiar, and require to be well studied that the feeding may be based on rules laid down in accordance with precise principles. It is impossible for these rules to be precise in every particular case, for horses differ very much both in the habits of eating and in their ability to digest their food, and the principles involved should therefore be known and understood, when it will not be difficult to adapt the feeding to the conditions and requirements of each case.

The food must be of the right kind, and it is quite safe to say that in general horses are the worst fed of any of our domestic animals. The winter feeding is usually hay, chiefly clover, or partially clover, and corn. These foods are too rich and do not contain sufficient crude fibre to fill the stomach and bowels so as to insure healthful action. The clover is too nitrogenous and the corn is too carbonaceous, and the effects of these foods are to exert too much certain organs, which are thrown into disorder. The excessive nitrogen of the clover must pass off through the kidneys or it remains in the blood, causing various inflammatory disorders, and at least that very common irritation which

produces eruption on the skin and itchiness that induces the animal to rub itself until the hair is removed or the skin itself is worn off. The excessive carbon of the corn affects the liver, and this in turn interferes with the ordinary organs, or it disturbs the action of the lungs and prevents the proper purification of the blood. The common ultimate results of these disorders are farcy, purpura hemorrhagica or anasarca, and finally, no doubt, glanders is induced by the final poisoning of the blood. But these are all indirect and ultimate consequences of indigestion of food, and there are many direct disorders resulting from it which cause a good deal of trouble. Some of these are colic—spasmodic—which is most serious, and flatulent, windy, or tympanitic, which is most common. The latter, however, sometimes results fatally by producing rupture of the stomach or bowels by reason of the great distention of these organs by the accumulated gas, which cannot escape and which is caused by the fermentation of the indigested food. At times the nervous system is involved and the common staggers, or apoplexy caused by congestion of the brain results; or in bad cases the more serious mad staggers, or frenzy, (Phrenitis,) occurs, with usually fatal results. Paralysis, complete or partial, of the spinal system of nerves also results from indigestion and breaking down, inability to stand or move, with sudden falling in harness or on the road, takes place.

These instances show the serious nature of this disorder, which is not surprising when we remember how the food is the sustenance of the animal, supporting all its organs and controlling all its vital functions, and, when it fails to do its office, necessarily all these fail with it.

Prevention is better than cure; and a few simple rules in regard to feeding and watering may secure immunity from these disorders. The stomach of a horse is comparatively small, and concentrated food, or, if the food is bulky, numerous small meals are required to secure perfect digestion. Ample time should be given for feeding, and if the animal has a greedy and voracious habit and swallows its food hastily, this should be cut into chaff or ground into meal and mixed together with sufficient water to avoid sloppiness and no more. Cut feed is always more digestible than long hay and whole grain, and the common supposition that it makes a horse "soft" and easily sweated is not well founded, for the condition of moistness in which it is given is only a preliminary to the moistening of the food by mastication. A sufficient secretion of saliva during the feeding is indispensable to digestion, as the salivary fluid is a true digestive agent and dissolves starch and converts it into sugar. A regular ration of salt is also indispensable for digestion, as the acid of salt (hydro-chloric) in present in the digestive fluid of the stomach and some soda (the alkali of salt) is always present in the bile, which is one of the most important agents of digestion. Mixed food is better than any one, for one helps considerably to digest the other. Thus, bran helps in the digestion of corn and oats, and so does linseed meal, besides providing the necessary oil required for complete digestion of crude fibre and nitrogenous matter.

Water should always be given before feeding and never immediately afterward. Colic is often produced by copious watering soon after eating, and also by watering when the animal is hot and weary from work; the stomach, being chilled, is for the time incapable of digesting any food. Light feeding



## Correspondence.

### Criticizing Senators.

*Kansas Farmer:*

By watching the moves of the State Senate, farmers can see that the members are mere puppets in the hands of Barker, attorney for the Santa Fe, and Blue, attorney for the Gould interest. I do not charge the other members with dishonesty, or imbecility; but before they can see the "meat in the cocoa nut," bills in favor of the railroads are passed, or if seen, they are pressed in the vote. The railroad Senators dare not vote against the bill or bills and go home to their constituents, but work together to defeat them in the House of Representatives. If the attorney for the Santa Fe wants a bill passed in favor of his client's road, the attorney for the Gould interest will only agree to it by getting equal advantages for his client's road. They will agree to omnibus bills through, or one will oppose the other. And we do not see with such puppet workings in the Legislature, that the farmers have any rights, only to raise farm products to ship over the railroads represented by these attorneys, and pay whatever charges they may see fit to charge against such shipments.

It was an easy matter to pass a bill to aid the Supreme Court by increasing its working force by commission, but when Senate bill No. 38 came up, it must be defeated by Barker and Blue, yet when pressed to a vote these gentlemen dare not vote against it. But when this Senate bill goes to the House, it becomes lost; that is, it must be smothered by the railroad interest, as it is some seven days since it went to the House and has not been heard from up to date.

This bill is simply to make the losing party in the case pay all costs and attorney fees on both sides. The farmers of Kansas are not afraid of this bill, but the railroad attorneys are, as they seek to delay and defeat justice, by filling the courts with litigation, and would have costs and attorneys fees to pay on both sides. These men were elected to look after the interests of the whole people of Kansas, not to effect class legislation. We enter our protest against electing a railroad attorney to either the House of Representatives or the State Senate. They should not be eligible to either office.

A FARMER.

### Under-Draining With Tiles.

*Kansas Farmer:*

Tile draining prevents the drowning out of crops in the wet season; it enables the farmer to work the soil earlier in the spring and sooner after a rain; it prevents the souring of the soil caused by excessive moisture; it lessens the risk of surface washing; it keeps the ground moist and the crops growing in a dry season; it permits a more thorough cultivation, as the ground is in a better condition; it increases the fertility of the soil.

To comprehend this, we must consider some of the characteristics of the soil and the requirements of successful plant growth. The best condition of soil for successful plant growth is found when the particles of the soil are moist but when there is no standing water between these particles. Water standing in the soil causes the vegetable matter to undergo what chemistry calls the acetic fermentation, thus rendering the soil sour and unfit for cultivation. Under-draining removes the trouble by removing the cause. If the soil is full of water, that which falls upon it must flow off over the surface, carrying with it much of the best and finest of the soil, and often doing much damage. Under-draining leaves the pores of the soil empty, so that water falling on it sinks directly in to be carried off by the tile drains. An illustration of this may be noted on hillsides; the rain falls on the ground and finds its way out to the edge of rocks, where you always see it the wettest part of a field.

But if these points are reasonably clear, how can under-draining land keep it moist and the crops growing in a dry season? I answer: First, by enabling the farmer to thoroughly pulverize the soil, which fits it for drawing up moisture from below. Second, by causing the plants to send their roots deeper in the soil. When a plant begins to grow in the spring in an under-

drained soil, the roots will not penetrate into the cold lower soil filled with stagnant water, but the roots run along through the few inches of drier surface. When the hot sun of early summer comes it completely dries this out, and the plant having no other source of supply dries up and perishes. On land that has been well tile-drained—moist, but with no water between its particles—the plant sends its roots far and deep. When the sun of summer comes and dries the ground, the plant thirsts not, for it has communication with the cool moist soil far below. Third, by preventing the soil from becoming baked and cloddy. When a soil is saturated with water and becomes dry simply by evaporation, it hardens and bakes so that it is incapable of receiving moisture either from the air above or the earth below.

Paola, Kas. S. A. B.

### Milo Maize.

*Kansas Farmer:*

I see in a recent issue of the FARMER an inquiry about milo maize. In reply to that, I would say that I have raised it for two seasons and find it a profitable crop. It will yield more grain per acre than corn will; all kinds of stock are fond of it, and it makes the best of johnnycake. Quite a number of my neighbors have eaten of the cake, and they all say it goes ahead of corn. Besides that, drouth and chinch bugs don't affect it as they do other crops. My crop this year yielded about fifty bushels per acre. I can spare a little seed to some of your readers if they wish it.

W. A. BAUER.

Ellsworth, Kas.

### Milo Maize.

*Kansas Farmer:*

I received two pounds of seed from a friend in Texas last spring. It was late before I planted it, so that it did not have the best chance. I put about three-fourths of it in rows thickly planted for fodder, and it yielded a large quantity of fodder; cut it twice, and it was about ready to cut again when the early frost of November came. The other three or four ounces I planted in rows about three and a half feet apart and dropped two seeds to the hill every three feet to let it grow for seed, and it did well. I cut off of it about six bushels. I estimated it would have yielded about fifty bushels of seed to the acre. The seed is about the size of and very much resembles that of rice corn. I have grown both, and think it far superior to rice corn. The seed can be had of any Southern seedsman. I am a poor hand to describe anything. You can make what use you please of this, or none, if some one explains it better. If any one wishes to know more about it, if they write me, enclosing stamp, I will reply.

R. B. BRIGGS.

Great Bend, Kas.

### Oats.

*Kansas Farmer:*

I do not know as Kansas is one of the best of countries in which to raise oats, nevertheless by good management we may raise a fair crop, and as the season or sowing is near at hand we should know on what part of the farm we intend to raise our crop.

It is not at all advisable to sow oats on a piece of land that oats was raised on the previous year. The best result as a rule is obtained by sowing on corn stalk ground. The ground should be plowed about four inches deep; if stalks have been burnt off the land, sow with drill, cover about two inches. If land is trashy, better sow broadcast and cover by harrowing thoroughly. Sow about two and a half bushels of seed to the acre; a little more will be better should you sow broadcast.

The oats known by the various names as Red Russia, Red Texas, or Rust Proof (they are all the same oat), give the best satisfaction generally where they have been tried. Brother farmers, do not be afraid to write upon the different subjects to the interest of the agriculturist.

A FARMER.

Senator Sawyer, of Wisconsin, weighs just three hundred pounds, with five silver dollars in his trousers pocket.

A monument to commemorate emancipation is to be erected by the colored people of Vicksburg, at a cost of \$50,000.

At Lewiston, Me., recently, an eight-year-old boy went on the stand and swore that his father's regular business was stealing.

## IS THERE ANY HOPE?

### NEW AND IMPORTANT OPINIONS OF PULMONARY EXPERTS.

Can the Universal Consumption be Successfully Treated?

Dr. Borgeon, a leading French doctor, has a new treatment for consumption!

He gives an enema of carbonic acid and sulphuretted hydrogen gases, the latter gas carrying the former into every part of the throat and lungs.

This treatment, too, is directed at effects—the cause remains undisturbed.

What this cause is has been stated by perhaps the highest pulmonary authority in the world, & c., the Brompton Hospital for Consumptives in London, Eng.

This malady every year carries off from one-seventh to one-fifth of the entire population of England!

Dr. Payne, M. D., M. R. C. P., London, is authority for this statement.

The same or a greater proportion of deaths obtains in America.

Dr. Payne also says that one-half the total number of deaths from all other causes have seeds of this disease in the system which only require some irritant to develop!

Dr. Hermann Brehmer, an eminent German authority, says that consumption is caused by deficient nutrition of the lungs, by poor blood.

These authorities cannot be disputed. The medical world recognizes them. The uric acid is the irritant in the blood that causes the development of the seeds which Dr. Brehmer says lie dormant in the blood.

Every particle of blood which passes through the lungs and heart, also goes through the kidneys, and if they are in the least deranged they cannot rid the blood of its killing poison. The thousand little hair-like sewer tubes of the kidneys very easily get blocked up and diseased; and when they do, they corrupt instead of purifying the blood. Kidney disease may exist, and yet no pain occur in that organ, because it is deficient in nerves of sensation.

Dip your finger in acid every day and it soon festers and is destroyed. Send acid-poisoned blood through the lungs every second, and they soon give way.

The Brompton Hospital investigation showed that 52 per cent. of the victims of consumption were afflicted with deranged kidneys, which permitted the uric acid poison to remain in the blood and irritate the lungs. This uric acid is always fighting every vital organ, and if there be any inherent weakness in the lungs it inevitably causes pneumonia, cough and consumption.

The real cause of pulmonary troubles being so authoritatively shown to be faulty even though unsuspected action of the kidneys, explains why, in order to master the dreaded consumption, one must rid the blood of the uric acid irritant which inflames and burns up the lung substance. For this purpose there is nothing equal to that great specific, Warner's safe cure. This remedy has now the favor of medical men all over the world purely on its merits. We have no doubt that if the kidneys are kept in natural action, consumption and a great many other diseases, caused by uric acid, will not only be cured but will be prevented.

When the kidney is healthy, no albumen appears in the water, but albumen is found in the water of more than half of those who die of consumption!

This, then, is the condition of things that always precedes consumption: First, weakened kidneys; second, retained uric acid, poisoning the blood; third, the development of disease in the lungs by the irritant acids passing through them. Then there is a little cough in the morning; soon thick, yellow matter is spit up, followed by loss of flesh and strength, with dreadful night sweats; and when the patient goes to his school physician for help, he is put on cod liver oil, which his stomach, weakened also by uric acid in the blood, cannot digest. Because there is no pain present in the kidneys, the patient does not think they are affected, but the kidney acid is doing its work every minute, every hour, day and night, and by-and-by the disease of the lungs has advanced until pus is developed, then come hemorrhages, and at last the glassy stare which denotes that the end is near!

A post-mortem examination of such cases

shows that the terrible uric acid has completely destroyed the substance of the lung. It is impossible to cure lung disease when the blood is poisoned with uric acid.

### Broomcorn.

From the broomcorn circular of Hagey & Wilhelm, commission merchants, St. Louis, Mo., we clip the following: "Speculators having purchased the bulk of the present crop, have formed a pool, and are holding their immense purchases in warehouses in the cities at big profits. Manufacturers all have light stocks on hand, and are buying sparingly from speculators. They prefer purchasing original shipments from growers, believing that the pool will break when prices will go much lower. Shipments made to us now will meet profit sale at 3 to 5 cents per pound, according to color and quality. Commission for selling, 5 per cent., and no other charges."

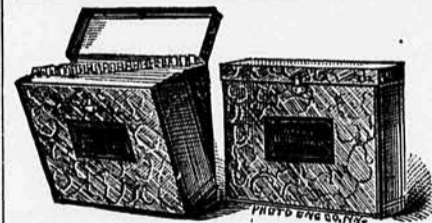
### Co-operation in Fire Insurance.

The Kansas Home Insurance Company takes the usual rates of premium, and divides "all the earned surplus" (which is all that can be saved from premiums) back to its policy-holder. If this principle were carried a little farther, giving off commissions to those applying for insurance in person or by letter direct to the company, thus saving all the expense of the middleman (or agent), we should say that in one business at least the farmers of Kansas had achieved all the success desired. The list of over sixty of the leading reliable and solid men of our State as incorporators and managers is substantial guaranty of an honorable and just management. We advise all interested to call on this company at its general office, No. 9, Office Block, Topeka, or address a communication there.

Siberian cats now crowd the Maltese from the warm corner of the hearthstone rug.

# ROYAL BAKING POWDER Absolutely Pure.

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



### THE COMPLETE LETTER FILE.

BUSINESS MEN, Consult your own interest and use the Complete Letter File, the most convenient and practical file made. It indexes and files all Bills and letters. Price 50 cents. Discount to the trade. Liberal terms to Agents. A. H. Green, Box 83, LeRoy, N. Y.

### TWO INVESTMENTS THAT WILL PAY!

(1) A home in the booming town of Merrill, Kan., by paying \$2 per month for five months—an investment on which you can double your money in less than six months. (2) "The Student's Guide to Business," price 40 cents, and "The Juvenile Speaker," 25 cents. Both sent, with Catalogue of our books, for only 25 cents. Send for these books, and full particulars of Kansas Investment, to J. E. SHERRILL, Danville, Indiana.

**Gossip About Stock.**

The second annual meeting of the Holstein-Friesian Association of America, will be held on Wednesday, March 16th, at the Genesee Hotel, Buffalo, N. Y.

John Wallace of Davis County, reports that the past winter has been a good one for stock, and at present are in excellent condition. Water is somewhat scarce in the northeast part of the county.

Grosse Isle, the largest island in the Detroit river, ten miles below the city, was first occupied by the French over one hundred years ago. It is now occupied principally by French horses—imported Percherons. Here is located the famous Island Home stock farm, owned by Savage & Farnum.

Every farmer that has cows will do well to examine the merits of the Champion Creamery, which raises all of the cream, between milkings, and makes a most superior grade of butter. It has a surface and bottom skimmer, so that every one using it can suit his convenience. Every one should examine the illustrated pamphlets before purchasing others.

The picture of the famous Percheron stallion Jupiter, painted by Rosa Bonheur, is attracting a great deal of attention in Paris. Jupiter himself is owned by Savage & Farnum, proprietors of the Island Home stud of Percheron horses, Grosse Isle, Wayne Co., Mich. A very good engraving of him made from Rosa Bonheur's sketch, appears in their catalogue.

The *Nebraska Farmer* has the following regarding the draft-horse sale of Mark M. Crad of Tremont, Nebraska, advertised in this paper: Nine stallions for \$13,745, an average of \$1,527.25, including a stallion colt which sold for \$1,275, the lowest price paid. Ten mares for \$7,905, averaging \$790.50, and one ten month's mare colt for \$300. Nine grade stallions sold for \$2,225, averaging \$247.50.

A subscriber from Harper County writes: "We are having light rains and foggy weather now, which is helping out the wheat in fine shape. It has come through the winter better than was expected. Cattle are doing well; not many fat cattle and hogs left in this neighborhood. My ensilage fed steers will be heard from in May. I have my plans out for a 200-ton silo for next fall."

Have you seen the catalogue of the first annual public sale of 45 head of standard-bred trotting stock, roadsters, general purpose horses and mules, to be sold on Tuesday, March 15, at Manhattan, by Wm. P. Higginbotham? This is to be the first of a series of first class horse sales which are to be held every year at this famous establishment. You will find something you want at this sale.

**Whiting News:** Mr. C. W. McCormack & Co., of the Valley Hill Farm, received a few days since, another car load of pure bred Short-horn bulls from one of the best herds in Kentucky. Mr. McCormack has sold in the last fifteen months, thirty-seven head to some of the best farmers in this part of the state. We wish them success and hope they may have the liberal patronage they richly deserve, in helping build up our country with fine cattle and horses.

Sexton & Offord of Topeka, who have been advertising in the *KANSAS FARMER* sometime, report a number of sales of horses and cattle. Some sales were made in Nebraska and Dakota. A Mr. Swartz, of Abilene, secured a very fine imported Red Polled bull and a heifer for \$725; and P. P. Fadeley, Fairview, Brown County, bought one imported bull and 25 grade cows. Mr. Sexton of the firm is now in England and will soon return with a very choice lot of horses.

F. E. McHardy, importer and breeder of Galloway cattle, Emporia, Kansas, writes that a boom in real estate in Emporia just now, as well as quite a demand for Galloway cattle. My advertisement in your paper brings me a great many letters of inquiries about Galloways and some buyers. I sold to Joshua Seidel Dillon, Dickinson County, Kansas, three head of Galloways: one bull calf for \$300, and two yearling heifers for \$1,200. These heifers were exhibited at the leading fairs last fall, to-wit.: Lawrence and Kansas City, and divided honors, and they were very much admired on account of their quality and superior breeding. Jane Seaton 4th (1426), by MackLead of

Drumlanrig (470), Dam, Jane Seaton 2d (467), by Lord of Nithsdale 616, and Lady Dacre 3d (1472), sired by MackLead of Drumlanrig 470, Dam Lady Dacre 2d (1419), by Knowsley 1279, etc. These were of my own breeding, and they have descended from animals bred by the best breeder of Galloways in Scotland.

**The Draft Horse of France.**

While some people in America call all horses imported from France Normans, it is a fact that there is no breed in France called by that name by the French people; the name, Norman, therefore, is purely American. The principal breeds of France are known as Percherons and Boullanais. The Percherons are the most highly prized of all French races, and all departments of France go to the Perche for stallions to improve their local breeds. The Percheron stud book of France, published under the authority of the French government, is the only stud book of draft horses that is or ever has been published in France, and now contains the pedigrees of over 5,000 animals. But some importers are offering certificates from France of Norman draft horses that may mislead people who do not understand the French language into believing these records of origin. Not one of them issued contains a pedigree. They are furnished at the request of American buyers by the Secretary of one of the French Agricultural societies, who says there is no intention of publishing them in stud book form, as they have no pedigrees and are of no value whatever. It is a well-known fact that what a man gives for a horse over from \$500 to \$800—the price of a good grade—is paid for purity of blood; and where the seller is not able to give the recorded pedigree of the animal sold as evidence of additional value, he has no right to ask it. With these facts before him, no intelligent man will buy a horse imported from France unless he is recorded with his pedigree in full in the Percheron Stud Book of France.

**Money Tells!**

It is a well-established fact that A. D. Robbins & Co., 179 Kansas avenue, Topeka, Kas., can place large farm loans, of \$3,000, to any amount required, at lower rates of interest and less commission than any agency in Kansas, when security is satisfactory and title perfect. No unreasonable delay. Our business is strictly confidential—or we could refer you to parties where we have placed in past year \$5,000, \$10,000, \$15,000, \$20,000, \$40,000 loans. We are prepared to make better rates than ever. Send description of property and amount required, and apply to headquarters for large or small loans. When applying for loans give numbers of land, town or range, amount of improvements and number of acres under plow.

Address A. D. ROBBINS & Co., Topeka, Kas.

**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., Bank of Topeka Building, Topeka, Kas.

**ELY'S CATARRH CREAM BALM**  
Gives Relief at once and Cures  
**COLD IN HEAD, CATARRH, HAY FEVER.**  
Not a Liquid, Snuff or Powder. Free from Injurious Drugs and Offensive odors.



**ELY'S CATARRH CREAM BALM CURES COLD IN HEAD, CATARRH, HAY FEVER, BRUISES, HEADACHE, PRICE 50 CENTS, ELY BROS., OWEGO, N.Y., U.S.A.**

A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists; by mail, registered, 60 cents. Circulars free. ELY BROS., Druggists, Owego, N. Y.

**Free Treatise** For the Weak, Nervous and Debilitated; How to regain Health, Strength and Vigor. **Home Treatment** for Nervous and Mental diseases. TRIAL SENT. Address DR. J. W. BATE & CO., 283 S. Clark street, CHICAGO, ILL.

**SURE** cure for epilepsy or fits in 24 hours Free to poor. Dr. Kruse, M.C., 2336 Hickory St., St. Louis, Mo.

**ROOFING! ELECTRO MEDICAL**



FOR  
**FLAT AND STEEP ROOFS.**  
Put on by Anybody Rapidly.  
NOW IN USE NEARLY FIVE YEARS.  
**WATER and FIRE-PROOF**  
**ONE - HALF COST**  
**Of Metal Roofs!**  
**ROOF YOUR OWN BUILDINGS!**  
**WIND & RUST-PROOF**

MARION, KAS., December 6, 1886.  
"Have used your Prepared Roofing for four years, and considering the durability, think it the best and cheapest roofing that can be used."  
CHICAGO LUMBER CO.

SEND FOR SPRING CATALOGUE AND PRICES

**BUILDING PAPERS, SHEATHING FELTS, ETC.**

**M. EHRET, JR., & CO.,**  
Sole Manufacturers,  
113 N. 8TH ST., ST. LOUIS, MO.  
W. E. CAMPE, Agent.

**I CURE FITS!**  
When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office. It costs you nothing for a trial, and I will do you.  
Address Dr. H. G. ROOT, 182 Pearl St., New York.

**THE KANSAS HOME INSURANCE COMPANY**

—AT—  
**TOPEKA, :: KANSAS,**  
**A CO-OPERATIVE COMPANY.**  
Which divides all its earned surplus to its policy-holders, in proportion to premium paid.  
**BETTER THAN A STOCK COMPANY. -- BETTER THAN A MUTUAL COMPANY.**

Explanatory Circular free. HARRISON WELLS, President. BYRON ROBERTS, Treasurer. Refers, with confidence, to every disinterested business man in Topeka.


Headquarters of the U. S. A. for the treatment of Acute and Chronic Diseases. Thirty years experience with medicine, nineteen years of that time a clinical experience with electricity.

Diseases under the following headings are cured by Electricity, Medicine and Ozone, except in the last stages of the same:

- Skin Diseases,
- Diseases of the Eye and Ear,
- Female Diseases,
- Diseases of the Respiratory Organs,
- Diseases of Digestive Organs and Bowels,
- Diseases of the Genito-Urinary Organs,
- Diseases of the Brain and Nervous System,
- Diseases of Fibrous and Muscular System.

Send for Circulars. I am permanently located in Topeka.  
A. W. TIPTON, M. D.,  
76 KING ROW, SIXTH ST., EAST.

**TOPEKA Medical and Surgical INSTITUTE**



This institution was Established Fourteen Years Ago, and is incorporated under the State laws of Kansas. During that time it has done a flourishing business and made many remarkable cures. The Institute is provided with the very best facilities for treating every kind of physical deformity, such as Hip-Joint Disease, Club Foot, Wry Neck and Spinal Curvature, having a skilled workman who makes every appliance required in arthroplastic surgery. Incipient Cancer cured, and all kinds of tumors removed. Diseases of the Blood and Nervous System successfully treated. Nose, Throat and Lung Diseases, if curable, yield readily to specific treatment as here employed. All forms of Female Weakness relieved. Tape-Worm removed in from one to four hours. All Chronic and Surgical Diseases scientifically and successfully treated.

**PATIENTS TREATED AT HOME.**  
Correspondence solicited. Consultation free. Send for circular and private list of questions.  
DRS. MULVANE, MUNK & MULVANE,  
No. 86 East Sixth street, TOPEKA, KAS.

**ON 30 DAYS' TRIAL.**  
THIS NEW **ELASTIC TRUSS**  
EGGLESTON'S SENSIBLE TRUSS  
Has a Pad different from all others. Is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the ball in the cup presses back the intertines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.  
EGGLESTON TRUSS CO., Chicago, Ill.

**EVERYTHING FOR THE FARM AND GARDEN.**  
All orders accompanied with cash filled at lowest market prices on day of receipt.  
**GRASS SEEDS**  
HEADQUARTERS AMERICAN GROWN  
J. M. McCullough's Sons,  
134 and 136 Walnut Street, CINCINNATI, O.  
(Catalogue free.)

**BUIST'S GARDEN SEEDS**  
ESTABLISHED 1838.  
Are always grown from selected seed stocks which insure not only the earliest vegetables, but those of finest quality, and guaranteed to give satisfaction or money refunded. Our handsomely illustrated Garden Guide mailed on application.  
**ROBERT BUIST, JR.**  
Seed Grower. PHILADELPHIA.

Explanatory Circular free. HARRISON WELLS, President. BYRON ROBERTS, Treasurer. Refers, with confidence, to every disinterested business man in Topeka.

## The Home Circle.

### The Land of Dreams.

Between the darkness and the day  
A charmed pathway lies,  
A shadowy, shining, mystic way  
That leads to paradise—  
A way through sunlit meadows set  
With primrose and with violet.

Through valleys where the daffodils  
Bend low to every breeze,  
Across the mists, across the hills,  
Beyond the farthest seas,  
Beyond the sunset's golden bars,  
Beyond the silence of the stars.

There is the Land of Long Ago,  
And there, the woods among  
The summer winds are soft and low,  
The summer light is long,  
And Love is lord of leafy ways  
Through all the golden summer days.

Ah me! that happy land of dreams  
I never more shall find.  
The music of its woods and streams  
Still haunts the wandering wind,  
But care and memory ever wait,  
Flame-sworded by the golden gate.

When acorns fall and swallows troop for flight,  
And hope matured slow mellow to regret,  
And Autumn, pressed by Winter for his debt,  
Drops leaf on leaf till she be beggared quite,—  
Should then the crescent moon's unselfish  
light  
Gleam up the sky just as the sun doth set,  
Her brightening gaze, though day and dark  
have met,  
Prolongs the gloaming and retards the night.

So, fair young life, new risen upon mine,  
Just as it owns the edict of decay  
And Fancy's fires should pale and pass away,  
My menaced glory takes a glow from thine,  
And, in the deepening sundown of my day,  
Thou with thy dawn delayest my decline.  
—Alfred Austin.

It shuns the palace, rich and great,  
Nor seeks the lordly hall,  
But glances through the cottage gate,  
Or crowns the broken wall;  
It blooms beside the lonely way,  
And cheers the hallowed spot  
Where rests the noble blue or gray—  
The blue forget-me-not.  
—A. E. Mitchell.

A day, an hour, of virtuous liberty  
Is worth a whole eternity in bondage.  
—Addison.

They never taste who always drink;  
They always talk who never think.  
—Prior.

### BATHS FOR THE MASSES.

#### A Place Where the Poor May Bathe at Slight Expense.

A wealthy Michigan lumberman, inspired by purely humanitarian motives, has started to do for the poor of Chicago what the city should have done long ago. He is not even a resident of the city and has no interests here beyond a praiseworthy desire to benefit mankind. His name is Charles F. Ruggles, and his home in Manistee, Mich., where he has built up a great lumbering industry and accumulated property that aggregates something like \$2,000,000. Mr. Ruggles is a bachelor and spends a good deal of his time and money in performing charitable acts. His pet whim, and one that has won him the reputation of being a mild sort of crank, is that the public ought to be induced to take frequent baths. Summer and winter he takes a bath regularly every morning, and he points with pride to the fact that he has never known a sick day in his life. This he attributes entirely to cleansing his skin from impurities.

One day last summer while in Chicago he noticed that a great many persons whom he met on the streets and in the horse cars were personally very dirty. In making inquiries he found that 25 cents was the lowest price at which a person could obtain a bath, so he determined to establish a bath house here where the prices would be within reach of even the poorest. It did not take long to get this project started, and he began by leasing the first floor and basement of a large brick building on west Madison street. This locality was well selected as being the most accessible from all parts of the city. It cost nearly \$13,000 to fit the place up, as no money was spared in making it both comfortable and attractive. Aug. 21, the baths were opened to the public at prices ranging from three to ten cents. Mr. Ruggles in establishing these prices had no idea that the place could be made self-sustaining the first year that it was in operation, and he counted on the city to help him out by furnishing free water. His first move in this direction met with no end of opposition. Mr. Ruggles consulted an attorney and was told that any charitable institution, indorsed by two taxpayers, was entitled to receive water from

the city free of charge, and he has now made an open appeal to the Mayor.

Any one who visits the place and sees the accommodations that are furnished for a mere trifling consideration can but admit that it is a charitable institution of the highest order and one that is entitled to public consideration. On entering, one steps into a neat office tastefully furnished and separated from the rest of the establishment by a wire screen. On the left is the cashier's desk where a woman appointed by the Woman's Christian Temperance Union presides. If you want a bath you present your money and the cashier hands out a ticket on which is printed the number of the room you are to occupy and the length of time you are permitted to remain. This ticket is taken at the gate by one of the porters who conducts you to the room, shows you how to operate the bath, and gives you any attention that may be required. When the ticket is given out the cashier jots down the number of the room on a time sheet and when the bather closes the door of his apartment the fact is known in the office by means of an electric annunciator similar to those used in hotels. Time is then taken and noted on the sheet under the number of the room. The bather is permitted to remain twenty minutes, and if there is no one waiting he can stay as long as he desires. If the room is wanted for another the cashier touches an electric button when the allotted time has expired and this rings a bell in the room, informing the bather that he must dress.

The bath rooms, forty-four in number, are ranged in two tiers and in double rows. In the first tier there are sixteen rooms, each five feet six inches long and five feet wide and of sufficient height to accommodate the tallest persons. They are divided into exclusive apartments by pine partitions of hard oil finish. Not a speck of dirt can be seen on the woodwork, which is carefully scrubbed every night. In these rooms is a metal tub, lined with porcelain and with faucets for hot and cold water. Printed rules, which are by no means stringent, are placed on the walls of each compartment, and there are also directions for manipulating the fixtures. Ventilators connecting with a high shaft are placed in each room to carry off the steam and heat, so that the temperature never varies, while the atmosphere is at all times healthful and pleasant. There are towel racks, brushes, shampoo bottles, a folding chair, foot drains, hooks on which to hang clothing, and in fact all the appurtenances necessary in fitting up a first-class modern bath room. These baths are furnished for ten cents each, and a reduction of two cents is allowed to those who bring their own towels. An iron staircase leads to the upper tier, which contains twenty-eight rooms. These are fitted up in a similar manner to the rooms in the lower tier, only they are somewhat smaller, and instead of a tub have a large shower fixture. The shower baths cost but 5 cents, or 3 cents if the bather brings towels. The bather undresses, and after drawing a rubber curtain in front of him to protect his clothing from being splashed, he stands on a drain under the fixture and turns on a shower of hot and cold water. The shower and temperature of the water are regulated by the bather himself.

In the rooms set apart for women are large mirrors with combs and brushes, but the men after dressing descend to the basement, where a large toilet room is fitted up, and when their toilet is completed they can reach the street without returning to the office. In going out they pass through a large barber shop, which is handsomely fitted up, and where a shave can be obtained for ten cents. This is part of the establishment. When the bather leaves his room an indicator drops down over the door, showing that the room is in disorder. One of the porters at once enters and gives it a thorough scrubbing. It is then ready for another occupant.

Having established the baths and demonstrated beyond question their importance and value, Mr. Ruggles now offers to donate the plant to the city if the city will agree to maintain the present low prices and devote whatever income may hereafter be derived to enlarging the establishment and extending its usefulness.—Chicago Tribune.

Human foresight often leaves its proudest possessor only a choice of evils.

It is no point of wisdom for a man to beat his brains about things impossible.

### Recipes in Sickness.

As sickness is sure to enter into every family of children sooner or later, a few suggestions and receipts may be of value to others, as they have been to me, especially when one lives several miles from a physician; and I do not think it best always to depend entirely on one, even though he lives at the next door. A mother ought to understand and best administer to the needs of her child. A watchful mother can tell as soon as the child itself when it is ailing.

**Whooping Cough.**—Crush a teaspoonful of sunflower seeds; put them into a quart of water; simmer it down to a pint (keeping it closely covered), add one-half pint best brandy and one pound of loaf sugar; then bottle for use. Dose, two or three drops to a small infant, one teaspoonful to a child of twelve years. In severe cases once in two hours until it affords relief; afterwards not as often. Pine tar burnt on the stove in a tight room will give relief to colds; also be beneficial to whooping cough.

**Diphtheria.**—The following is said to have cured a patient when he was past speaking and given up by the doctor: Take a quantity of the common dog fennel, steep it in strong vinegar and bind on the part affected. If the disease has reached an advanced stage, and the surface appear mottled and inflamed, when the poultice has been on for ten or fifteen hours—some cannot bear it near that time—as a sufficient time to draw the inflammation to the surface, apply a poultice of linn bark (basswood). If the case is not in an advanced state, the latter is not necessary; merely grease the surface of the throat with cream.

V. W. G.

### Notes and Recipes.

**Rye Cakes.**—One pint of rich milk, three eggs and half a teaspoonful of salt. Mix with enough rye meal to make a thin batter. Half fill cups or deep patty pans with the batter and bake twenty minutes.

**Roasted Rabbits.**—Skin and draw them and stuff them with bread crumbs, butter and minced veal, seasoned with salt, pepper and nutmeg. Cover the breasts with slices of bacon, which must be firmly tied on, and roast the rabbits before a brisk fire, basting often with the drippings and a little white wine or vinegar.

**Corn Cakes.**—Grate raw, green corn that is young and tender; to two cupfuls of grated corn add two tablespoonfuls of milk or cream, and three well-beaten eggs; salt to taste, and add a tablespoonful of melted butter, and three heaped tablespoonfuls of flour. Drop in spoonfuls on a hot, buttered griddle; brown one side and turn carefully with a broad griddle-cake shovel or turner.

**Baked Hash.**—Use a cupful of any kind of cold meat chopped rather coarse, a cupful of cold cooked rice, a generous cupful of milk, an egg, two tablespoonfuls of butter, one teaspoonful of salt and one-eighth of a teaspoonful of pepper. Put the milk on the fire, in a frying pan, and when it has become hot, add all the other ingredients except the egg. Stir for one minute; then remove from the fire, and add the egg, well beaten. Turn into an escallop dish and bake in a moderate oven for twenty minutes. Serve in the same dish.

**Corn Bread.**—One-half pint of white corn meal and an equal quantity of flour, one-half pint of sweet milk, one tablespoonful of soda and two of cream of tartar, or three small teaspoonfuls of baking-powder; two eggs and one tablespoonful of butter. Stir butter and sugar together, add the eggs, then the milk and salt, and last the dry ingredients. The flour, meal and baking-powder, or soda and cream of tartar, should be stirred together and sifted twice. Beat thoroughly and pour in a well-greased pan not much deeper than a pie tin. Bake till a broom-straw run in will be dry. Serve hot.

**Wearing Flannels.**—A great deal is being said of the efficacy of scarlet flannels, but it must be remembered that although warm and thick undergarments are needed, many children cannot wear colored flannels, just as there are some individuals to whom oysters and shell fish are rank poison. Flannels, especially those dyed with logwood and redwood, are known in some instances, to deprive the skin of acute feeling, while on the other hand, flannels colored with cochineal increase its sensitiveness. To some it produces irritation beyond endur-

ance, and to others it acts as a curative for rheumatism and neuralgia. For these reasons white flannel is always the safest.

**Paste that will keep.**—Dissolve a teaspoonful of alum in a quart of water. When cold, stir in as much flour as will give it the consistency of thick cream, being particular to beat up all the lumps; stir in as much powdered resin as will lie on a dime, and throw in half a dozen cloves to give it a pleasant odor. Have on the fire a teacup of boiling water, pour the flour mixture into it, stirring well at the time. In a very few minutes it will be of the consistency of mush; let it cool; lay on a cover, and put in a cool place. When needed for use, take out a portion and soften it with warm water. Paste thus made will last twelve months. It is better than gum, as it does not gloss the paper and can be written on.

### Laundry Lessons.

Before beginning to wash, all the bed linen and underclothing should be placed by themselves, the table linen and tea towels put in another pile, the flannels treated similarly, while colored clothes should be laid aside to wash last. Stains of all kinds on clothes should be washed out before they are laid aside for the regular wash. Spots on table linen usually yield readily to soap and warm water; wine stains should be covered with salt, wet, and rinsed out; fruit stains may be removed by pouring boiling water over them before they are wet; coal oil and common baking soda mixed in equal parts will have the same effect. To remove ink stains dip the part in hot tallow, or wash in new milk. If clothes are iron-molded, use oxalic acid, which will also remove mildew. Paint can be washed from any article by rubbing with lard and then washing.

As to the time clothes should be boiled a great difference of opinion exists. Some very excellent authorities on the subject condemn the practice, and advise scalding instead; if boiled, it should only be for ten or fifteen minutes, as long boiling is sure to discolor clothes; after they are scalded or boiled, add blue water and wash clean through the suds, then rinse through plenty of clear cold water, before taking through the process of bluing, then wring as dry as possible; and this is one of the most important operations of the work, as clothes with the water left in them will be streaked and yellow. There are now so many excellent wringers that every family should be supplied with one; but if the clothes are wrung by hand, they should be gathered in a twist evenly, and then wrung with a gentle squeezing motion until the water is all extracted. As soon as wrung, all garments should be at once shaken from their fold and hung out to dry.

Colored prints and muslins require very careful washing in two soapy waters (no soap being rubbed on them), and rinsing in clear cold water. In washing colored articles there are a great number of ways by which the color may be preserved in such as are liable to fade. For buffs, grays, or any very delicate colors, a tablespoonful of black pepper to a bucket of water will set the color. If boiled in vinegar, black cotton goods will never lose their freshness. Ox gall is also excellent to preserve colors, and is particularly useful in washing delicate tinted stockings. All colored goods should be hung in the shade to dry.

Merino, woolen, and silk underclothes and stockings are very easily spoiled in washing. None but the best soap should be used, and it should be dissolved in hot water. Do not rub the woolen clothes, but cleanse them by drawing them through the hands in and out of the suds. Rubbing shrinks and injures them. When clean, wring from the suds and rinse in warm, soapy, blue water, stretch into shape and hang out immediately. Woolen and silk goods should never be washed on a stormy or cloudy day.—Mrs. Eliza R. Parker, in Good Housekeeping.

### Deep Sea Wonders

exist in thousands of forms, but are surpassed by the marvels of invention. Those who are in need of profitable work that can be done while living at home should at once send their address to Hallett & Co., Portland, Maine, and receive free, full information how either sex, of all ages, can earn from \$5 to \$25 per day and upwards wherever they live. You are started free. Capital not required. Some have made over \$50 in a single day at this work. All succeed.

### The Young Folks.

Here have I laid me by my Love that's dead:  
An hour ago she shuddered, "Sweet, be  
brave!"  
Then sighed and died in the last kiss she  
gave;  
And all the music of the life we led  
Sinks like the anthem sinking overhead.  
Upon the carved sleepers on a grave,  
Cleaving in stone together as they clave  
In the life ended where they once were wed.  
"Be brave?" What then's the bravest way  
to die?  
Nay, 'twere the noblest dying for her sake  
To spend my heart blood slowly, through long  
years,  
And while my insatiate miser soul doth make  
Its dark, dear hoard of her sweet memory,  
Smile for the world, and serve it, keep my tears.  
—Eric S. Robertson.

Gathering still, as he went, the Mayflowers  
blooming around him,  
Fragrant, filling the air with a strange and  
wonderful sweetness,  
Children, lost in the woods, and covered with  
leaves in their slumber,  
"Puritan flowers," he said, "and the type of  
Puritan maidens."  
Modest and simple and sweet, the very type of  
Priscilla!  
So I will take them to her, to Priscilla, the  
Mayflower of Plymouth."  
—Longfellow.

A song for the girl we love,  
God love her!  
A song for the eyes with their tender smile,  
And the fragrant mouth with its melting smile,  
The rich, brown tresses uncontrolled,  
That clasp her neck with their tenderest hold;  
And the blossom lips, and the dainty chin,  
And the lily hand that we try to win.  
The girl we love,  
God love her.

### OKEFENOKEE SWAMP.

Oasis Where the Seminole Chief Took Refuge in 1836.

Okefenokee, the great swamp on the southern border of Georgia, extending across into Florida, has for a century been a mystery. It was the great retreat for the Seminole Indians. In the center of this immense swamp is an oasis, a beautiful spot midway between Belly's island and the Roddenburg settlement. It was in this spot that Billy Bowlegs, the great Seminole, took refuge in 1836 and successfully defied the attempts of the whites to capture him. Strange tales are told in the neighborhood of fugitives finding safety there who subsisted on the abundance of fish and game. The story of an authenticated exploration of this spot is told by Mr. Charles Pendleton, who in company with Ben Varborough, a local scout, and others penetrated the thick jungle which leads to it. His story runs thus:

"Camp Casena," as our party christened it, was a dry knoll covering about an acre in the midst of a marsh extending for miles, apparently north and south, and several miles east and west. It was nearer, as it turned out, to the eastern swampwood than to the western. Its center was perhaps eight feet above the level of the surrounding marsh, and it tapered off to the water's edge. A dwarfed cypress which capped its summit was immediately surrounded by smaller ones, like courtiers around a prince; and next to these, widening the circle, came the smaller casenas, like those of lesser rank. Then the gallberry and tyty tapered to the earth, forming the outer guard, armed with bamboo and shielded by creeping vines. The phalanx was so solid, the armament so perfect that no man or beast could penetrate it save by a hidden path which perhaps nature had left for an ingress and egress to the fauna of that region; or, more likely, the more powerful bear had broken through to find a lair. The whole from the topmost cypress bough to the least tyty was draped with gray moss mingling with the nut brown leaves of autumn, the myriads of crimson casena berries and the evergreen tyty—presenting a picturesque scene perhaps nowhere else seen. The marsh surrounding this queer spot varies in water depth from three inches to four feet. Underneath the water the mud varies in solubility, some places being extremely soft and dangerous to the pedestrian. But for bonnet roots and the thicker growth of maiden cane no man could cross it. The wonder is that anything but a webfoot ever did.

Our party did cut their way through tyty, bamboo and what not for three days prior to the morning of entering the marsh, and at first it was somewhat of a relief to be able to trudge forward with a long view ahead without having to fight and dodge through the entangled mass of undergrowth. The change brought rested muscles into action, and for a few hours we moved forward with

greater rapidity than at any time since entering the swamp. The compass pointed the way, and that brave band of explorers never hesitated when one sank to his armpits and had to be pulled out by his fellows—the civil engineer's chain often serving for that extra use—nor did they turn back when it became necessary to detour around an occasional alligator hole, distinguished by a pair or more of those huge amphibious creatures circling the dark water with their young. But the strain on the muscles of the lower limbs never relaxed. We could not sit down and rest. About noon the men began to show signs of unusual fatigue. The dark swampwood, such as we had been in for three days, could be seen distinctly ahead, but it was quite as far or farther than we had tramped that morning, and the outlook was not at all cheering. Some distance short of that now coveted region a gray object loomed up before our vision—right on our line—and we rightly divined that it was a little moss clad island in the marsh. We must reach it at all hazards before night.

We halted for lunch—hardtack and bacon—but there was no place as stated above, to sit down and rest the weary feet. One poor fellow found a banner root near the surface of the water, which he sat upon to crush it and sink in the mud and water up to his neck. A young man in the party, whose spirits never flagged, no matter how sore his feet were, sang out: "Push along boys; keep moving. Let's eat when we reach yonder island." But Dr. Little, the sea geologist, who was with the party, insisted that we should stop, if only for a few minutes, and eat, for it would give us strength for the afternoon's tramp. The wisdom of his suggestion was at once seen by all, and we ate hurriedly from the scanty store in our packs, continually shifting the weight from one foot to the other, and as often moving the released foot to prevent its sinking too deep into the mud. It was not a feast of the gods.

We pressed on with hope and fear. We thought we could reach the little island, as it seemed to us, by nightfall if no lake or impassable water lay on our route; and who could tell what was ahead in that despicable bog? The thought of encountering a deep lake was not at all pleasant. The day quite gone, possibly, and not a dry tussock within eight or ten hours' tramp! No place to sit or lie, much less to sleep, on a chill November night. No torch; no lantern; the compass in our hands would fail to keep us from wandering round and round in the darkness and gloom and mud as most men do, it is said, until daylight. If human endurance could stand the strain until then. It is not pleasant to think about the possible situation afterward.

About 3 in the afternoon a few drifting clouds, apparently thrown together just over in front of us by counter currents of air, brought forth a light shower, and the declining sun at our backs produced a beautiful rainbow which spanned directly across our route eastward. It was an unusual sight for the time of year. When we at last approached within a hundred yards of the little oasis above described, we encountered the severest quagmire we had yet seen. All along we had been measuring the distance traveled with a chain, that instrument being handled by a couple of negroes. Here there were several applicants anxious to relieve the boys, knowing that it would add to one's safety to have hold of a chain with a man at the other end. Dr. Little was the first victim. He went down to the armpits and struggled desperately to extricate himself, but a comrade near, who stood upon a firmer foundation, pointed the muzzle of his gun to him, which he seized and helped himself out. It was decided then the eight in the party should dispose themselves along the chain, one hand gripped to it, and with a strong negro at each end pull to the shore. We were about an hour traveling that one hundred yards. Sometimes as many as four of the eight would be stuck at once, and the other four would have to hold the chain against the weight of those struggling to get out, and oftentimes the pressure thus brought upon those who stood upon firmer footing would send them down, who would in turn have to be helped out.

When at last we reached the little island we were utterly overcome with exhaustion. There were a few feet of comparative dry ground between the marsh and the dense growth which walled in the island like an orange hedge, and not one of the party crossed it without falling prostrate upon the glorious terra firma. For ten minutes no words were spoken. The men were too exhausted to talk. The writer at length broke the silence, as the sun had hid himself behind the swampwood, and the chill night air was gathering over our wet and prostrate forms. Joe was called up and instructed to enter the island and build a fire with haste.  
—Cor. New York Sun.

### THE WITCH'S FATE.

A Cruel Prejudice of Old Times More Than Equalled Now.

Not many decades ago in this country, the people were excited over witchcraft. Persons suspected were thrown into the water; if not witches, they would drown; if they were witches, they would swim ashore, and would be put to death! In any event, they were doomed.

Not many years ago if a person were taken sick with advanced disorder of the kidneys, the physician would pronounce the disease Bright's disease, and when so declared, he regarded his responsibility at an end, for medical authority admitted that the disease was incurable.

When the physician found a patient thus afflicted, he would say, "Oh, a slight attack of the kidneys; will be all right in a little while." He knew to the contrary. But if he could keep his patient on his hands for a few months, he knew he would derive a great revenue from his case, and then when the disease had progressed to a certain stage, he would state the facts and retire, exonerated from all blame.

But the error of supposing the disease incurable, has swayed the public mind, long after the fact has ceased to be. But public opinion, has been educated to the true status of the case by those who have discounted the incurability theory, and the public recognizes and testifies to the fact that Warner's safe cure is a specific for this disease. This has been shown with thousands of testimonials.

Upon referring to them in our files we find that \$5,000 reward will be given to any one who can prove that so far as the manufacturers know they are not genuine, and that hundreds of thousands similar in character could be published, if it were necessary.

This condition of things is very amusing to the journalist, who looks upon all sides of every question. Proof should be accepted by all, but prejudice fights proof for many years. It seems strange that when a proprietary medicine is doing the good that Warner's safe cure is that the physicians do not publicly endorse it. Many of them, we are told, privately prescribe it.

A few years ago, as stated, when a man had Bright's disease, the doctor boldly announced it, because he thought it relieved him of responsibility.

To-day when prominent people are dying (and hundreds of thousands of common people die of the same disease), we are told that doctors disguise the fact that it is Bright's disease of the kidneys and say that they die of paralysis, of apoplexy, of pneumonia, of consumption, of general debility, of rheumatism, of heart disease, of blood poisoning, or some other of the names of the direct effects of kidney disease. They are not the real disease itself.

We sometimes wonder if they avoid stating the real cause of disease for fear they will drive the public into patronage of the only scientific proprietary specific for kidney diseases and the thousand and one diseases that originate in inactive kidneys.

We do not believe every advertisement we read. Some people perhaps may regard this article as an advertisement and will not believe it, but we are candid enough to say that we believe the parties above mentioned have stated their case and proved it, and under such circumstances the public is unwise if it is longer influenced by adverse prejudice.

In Genoa policemen wear silk hats and carry silver-headed canes.

When the best things are not possible the best may be made of those that are.

We know that we must meet to part, but we know that we part to meet again.

According to the security you offer to her, fortune makes her loans easy or ruinous.

## GOOD ENOUGH FAMILY OIL CAN.



The most practical, large sized Oil Can in the market. Lamps are filled direct by the pump without lifting can. No dripping oil on Floor or Table. No Faucet to leak and waste contents or cause explosions. Closes perfectly air tight. No Leakage—No Evaporation—Absolutely safe. Don't be Humbugged with worthless imitations. Buy the "Good Enough." Man'd. by WINFIELD MAN'G. CO., Warren, Ohio.

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WANT AGENTS for best SASH LOCK ever invented. Excellent ventilator. Stops rattling. Big pay. Sample & terms to agents 10 cts. SAFETY LOCK CO., 108 CANAL ST., CLEVELAND, O.

NEW CARDS, 40 Samples and AGENTS' Convassing Outfit for 2c. stamp. CARD WORKS, Northford, Conn.

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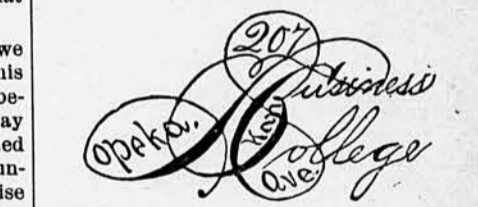
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# KANSAS FARMER.

ESTABLISHED IN 1883.

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We are in receipt of volumes one, two and three of the reports of the Colorado State Horticultural Society. They show that Colorado is making rapid progress in horticulture.

Hon. Wm. F. Switzler, Statistician of the Treasury Department, has our thanks for a copy of his report on commerce and navigation for the year ending June 30, 1886. Mr. Switzler is making a very useful officer.

The Mayor of Leavenworth, last Friday, issued a proclamation commanding the saloons to close. That was a very proper thing to do. If it had been done some years ago it would have been much better for all concerned. But better late than never.

We are in receipt of a little twenty-one page pamphlet entitled "Plans for Constructing the Kansas Poultry-Yard Incubator," by J. W. Hile, Valley Falls, Kas., with a note attached saying that it will be sent to any address on receipt of a 2-cent postage stamp.

A dozen years ago a large iron-making establishment was built in Illinois just across from south St. Louis at a cost of about a million and a half dollars. It closed a few years ago, and is now about to open again and resume operations. This is a good sign in the business world.

The two Houses of Congress do not agree on the bill to repeal the timber culture and pre-emption laws. The difference arises on the amendments made in the Senate saving the rights of existing claimants. It is doubtful whether any agreement is reached this session.

The German Emperor, a few weeks ago, dissolved the National Legislature (Reichstag) because it refused to increase the army for a period of seven years. An election for new members was ordered, and the Emperor says if he does not have a majority in the next Legislature he will dissolve that, also. People in all civilized countries are getting tired of standing armies. Kaiser Wilhelm will soon learn that even in Germany men are beginning to think about free government and freedom in citizenship.

The *New South*, published at Birmingham, Ala., comes to us with request to exchange. The *New South* is welcome on our table. It bears testimony to the new and better order of things in that country. There is a New South there, indeed. The rebuilding of the Southern States has been rapid in recent years. The nation's blood flows warmly there. A new spirit has taken possession of the people, and its work is manifest on every hand. Birmingham is an index of the general progress. Agriculture is improving in all the States, and manufactures are growing by hundreds every year. The KANSAS FARMER has a hand always ready to grasp those of its Southern contemporaries.

## THE LEGISLATURE.

Several local bills have passed and became laws. Friday and Saturday were spent by the members on an excursion to Wichita, McPherson and Hutchinson, and the rest of the time during the week was occupied in discussing various measures, among them the militia appropriation bill, the bills to pay the Price Raid scrip and to pay the expenses of the Topeka constitutional convention, the private charitable association bills, the county school tax bill—(this bill was rejected)—several bills relating to interests of laboring men—(making eight hours a day's work, prohibiting the "store pay" custom, etc.)—uniformity in taxation, to remove negligent officers, and the bill to appoint commissioners to assist the Justices of the Supreme court.

No bill of general interest has yet become a law except the municipal suffrage bill. The first and principal section of that is as follows:

SECTION 1. That in any election hereafter held in any city of the first, second or third class, for the election of city or school officers, or for the purpose of authorizing the issuance of any bonds for school purposes, the right of any citizen to vote shall not be denied or abridged on account of sex; and women may vote at such elections the same as men, under like restrictions and qualifications, and any woman possessing the qualifications of a voter under this act shall also be eligible to any such city or school office.

Whole number of bills introduced in the Senate 306; in the House 622, total in both Houses 928.

## Cold Weather North.

People of Kansas have many advantages that their northern neighbors do not enjoy. There has been very little cold weather in this State the present winter, but up North the situation is serious indeed, as the following dispatch from Assinaboim, Montana, shows:

For a period extending over the last six weeks, unprecedented snow, blizzards, and gales of wind, have raged through the northern and western portions of Montana. The oldest settlers acknowledge that the winter is the most severe of any for the last ten years. The main range of the Rockies has along its entire length through Montana from two to six feet of snow, and there is an average depth of twenty inches upon the prairies. Drifts have formed upon the cattle ranges and along the stage to a remarkable depth, and the surface of snow is covered with a crust too thick for cattle to break in order that they may reach the grass. Stock of all kinds are suffering in the most fearful manner, and while some of the cattlemen estimate the probable loss at 25 per cent., the majority claim to have quit figuring on losses now, and will be thankful if they have enough left to start anew in the spring. Hay is very scarce and high, \$50 per ton is paid with alacrity. Various mail coach lines have been the greatest sufferers by impassable roads. From delay of mails and mortality among their stock, the Helena & Benton Stage Company have lost thirty head of horses since Christmas. Great and continued cold weather caused in many places a serious fuel famine. In the town of Fort Benton, the question of fuel is becoming most serious, especially to the poorer classes, who are unable to pay the exorbitant prices demanded. Inferior cottonwood is easily sold for \$14 a cord, and ranchmen living along the Teton bring in green willow poles and dispose of them at from \$9 to \$12 a load.

Let us all go to playing base ball. Here is the way they make money in that ornamental profession. A dispatch of the 14th inst. says: "Michael Kelly, right-fielder of the Chicago Base Ball Club, was released from the organization

to-day by the payment by the Boston club of \$10,000. Kelly then signed for the season with the Boston club, who agree to pay \$2,000 for his services for the coming season, and to give him \$3,000 for his photograph, to place in the club's album, making his compensation for the season \$5,000. Kelly received \$2,250 from the Chicago club last year."

## The Insurance Business.

Among the things needed in Kansas and in all other States is protection against fraud in insurance. It is a difficult matter to handle, and up to this time the subject has not been handled in the public interest, not because of collusion on the part of legislators, but because of their ignorance of what can be done to remedy acknowledged defects in existing laws. Insurance is a good thing. Every person feels better when his property is insured against loss and when, in case of his death, his family or dependents will not suffer from want; but there has been so much fraud practiced in one way and another by both sound and unsound companies, that people, especially those in the country, are getting suspicious of all companies. Every observing person is cognizant of one or more cases where companies insured property at a valuation agreed upon and then refused to pay the full amount when the property was destroyed. They received the man's money on the full valuation, and that without objection, but when called upon to pay they were willing to pay only the actual value of the property. It was that or a lawsuit. Such cases are clearly fraudulent. If they take a risk at one thousand dollars, that is what they ought to pay in case of entire loss without blame on the part of the owner. There is no way to reach cases of that kind with foreign companies, unless it is done by a law of Congress, and that would probably require an amendment to the constitution.

This class of facts is mentioned merely for the purpose of calling attention to the general subject. Another class of cases, infinitely worse, is that where companies go into the insurance business as a venture intending to save money themselves no matter who loses. Where a responsible, honest company commits one act of questionable propriety, these swindling concerns commit a hundred barefaced frauds.

And then, in life insurance, even honest companies, led into extravagant expectations by the limitless measure of their ambition, deceive the people because they are deceived themselves. Two cases came under the writer's personal observation. A policy holder who paid all his assessments and annual dues was compelled to abandon two different companies that started out honestly, but could not maintain their business. In one case a \$5,000 policy was taken in a mutual company in 1881, and now after having paid in about \$300, he is informed that there are only a little over three hundred members remaining and that the last assessment produced only about \$500. If this policy holder were to die to-day, his widow might not get over \$200 in place of \$5,000 which she would have a right to expect.

The course which wisdom points out is the study of the subject by the people and a public sentiment created which will compel legislators to institute measures of protection. One step at a time will get us ahead if we keep going. Every honest, well-founded effort to increase the usefulness and efficiency of insurance organizations should be encouraged, and at the same time every possible safeguard against fraud and loss ought to be adopted.

## The Railroad Law Working Well.

There never was an important act of Congress relating to any department of business or industry which created less friction than does the inter-State commerce law. We called attention to this matter last week, alluding to some specific facts showing the readiness with which railroad managers are arranging their business to conform to the provisions of the law. And now we have further facts to state in the same connection. On the 18th inst., at New York city, the Trunk line executive committee and the Central Traffic Association in session at Commissioner Fink's office, adopted resolutions providing for several committees to revise all freight and passenger rates, and make them conform to the inter-State commerce law, and report as speedily and as fully as practicable to the joint committee, which shall then be promptly convened to consider and act upon the same. It was stated also that the question of passes was considered and that it was decided to recall them all and make no discriminations, except in the case of ministers and missionaries. The system of pooling was also incidentally touched upon, but nothing definite was done in the matter.

On the same day, at Chicago, the general passenger agents of the Southwestern Passenger Association lines concluded a four days' session given over to the consideration of the inter-State commerce law. Their conclusions cover twenty-four printed foolscap pages. They recommend the abolishment of the thousand mile tickets, theatrical rates and passes, and are uncertain as to whether any special rates can be made.

These things show that after all the noise made by some people about the impractical features of the law, railroad men regard its object as good, and they intend to do what they can to give it effect. These indications have special significance, and they are particularly gratifying to the KANSAS FARMER which has all along insisted that the carriers, for their own protection and in the interest of good management, need some general legislation that will serve as a guide and a general rule of action. The railroad system of this country is much larger than that of any other, so large, indeed, that some general rules are absolutely necessary. The companies have been struggling with difficulties some years, difficulties that have cost them millions of dollars, and it is those and similar troubles that the new law is intended to remove. Some rule is necessary, that is admitted on all hands, now the government prescribes the rule; that is much better than any arrangements made by and between two or more companies, because it will have the force and effect of law.

The most important matter now is the character of the commissioners. They ought to be men of the best ability and of the staunchest integrity. No little man has any business in such a place. The duties of the office are such that none but broad gauged men can discharge them. Men of experience, men of practical business culture, men of comprehensive minds well stocked with knowledge of trade relations, men of well trained common sense are needed. They must be well ballasted men, for they will have many conflicts, all of which must be considered in the light of justice and disposed of in the interest of the whole people. No petty rivalries, or jealousies, or bickerings must be allowed to sway opinions. The whole great subject must be dealt with for the common good.

The water in the Gulf of Bothnia has fallen three feet in fifty years.



The Nebraska *Farmer*, under the new management—Messrs. H. E. Heath and L. L. Seiler, late of the Kansas City *Live Stock Record*, gives evidence of renewed vigor. The paper has spirit and tone, as if living, working men had hold of it. There is no good reason why the Nebraska *Farmer* may not become a strong influence in Western agriculture. It needs only push and common sense steadily kept at work. Messrs. Heath and Seiler have had training that well fits them for the work. They are both practical men in farm work and in newspaper work, and both of them understand well that farmers want good papers as well as good plows. We greet our new contemporaries most cordially, and we wish them all possible success. They can give the people a good paper and we believe they will do it.

A cattleman of Montana writes that he expects to lose 50 per cent. of his cattle because of the extreme cold. A St. Paul dispatch of the 18th inst. quotes a letter from the postmaster at Allbright, Mont., stating—"Cattle on the ranges are dying by thousands. The winter has been comparatively mild, but we have not had any chinooks that we generally have. A large number of native steers have been driven into the bottoms by the storms and are dying like flies. For several days range cattle have been coming into the valley by thousands, wandering back and forth before the storm till they drop in their tracks. A stockman of eighteen years' experience writes from Billings: 'This is the hardest winter I ever experienced. I estimate my cattle loss at 50 per cent. now, and think it will reach 75.'"

The National Grange Lecturer says: "At this writing the President has not named the members of the inter-State commerce commission. It is to be hoped that he will recognize our order and the farmers of our country in appointing one representative of our class on the commission. Besides Bro. J. J. Woodman, the names of several other good patrons are 'at the front;' and being urged by their many friends. Among them are Bro. Leonard Rhone, Master of the Pennsylvania State Grange; Bro. Wm. A. Armstrong, Master New York State Grange, and Bro. Victor E. Piollet, Past Master Pennsylvania State Grange. It would thrill the hearts and nerve the hands of all true patrons to hear that either of these able leaders in our cause had received the appointment. They have all done much to bring about this legislation controlling inter-State commerce."

An important bill has been introduced in the Legislature for protection against fraud in registering animals in herd books. The body of the bill is in one section as follows: "Every person who by any false pretence shall obtain from any club, association, society, or company for improving the breed of cattle, horses, sheep, swine or other domestic animals, the registration of any animal in the herd register or other register of any such club, association, society, or company, or a transfer of any such registration, and every person who shall knowingly give a false pedigree of any animal, upon conviction thereof shall be punished by imprisonment in a State prison for a term not exceeding three years or in a county jail for a term not exceeding one year, or by a fine not exceeding one thousand dollars, or by both such fine and imprisonment." There is need of some such enactment, for while existing laws afford remedies against false pretences, yet it is well to make laws relating to particular matters plain. A man who will cheat his fellows in this respect needs to be watched and when caught punished.

#### Destruction of Polygamy.

It is nearly twenty-five years since Congress began to legislate with a view of getting rid of polygamy in this country. But it had no effect except to arouse greater determination among the Mormons. Public sentiment has been growing all these years stronger and stronger in opposition to the peculiar feature of Mormonism, until the whole people, outside the Mormon church, may be said to be practically united in their opposition. In harmony with the growing sentiment of the people, Congress became more and more aggressive. Laws were enacted which it was believed would go far toward breaking up the polygamous habit, but it has been found that still more rigorous legislation is necessary. So, a bill has been agreed upon by both Houses of Congress, one that embodies work of the most earnest statesmen in the Senate and in the House, compromising their differences, and it is now in the President's hands. The bill is a report of a conference committee on differences between the two Houses. Below we give a synopsis of its provisions as they were telegraphed to the country last Saturday morning.

The first six sections of the bill apply to a prosecution for bigamy, adultery, etc., and makes the wife of a husband a competent witness, but not to be compelled to testify.

The seventh and eighth sections apply to the powers of court commissioners and of the Marshal and Deputy Marshal.

The ninth and tenth sections apply to the marriage ceremony. They require certificates, properly authenticated, to be recorded in the office of the Probate court.

The eleventh section disapproves and annuls all Territorial laws recognizing the capacity of illegitimate children to inherit or be entitled to any distributive share in the estate of the father.

The twelfth section disapproves and annuls Territorial laws conferring jurisdiction upon Probate courts (with certain exceptions).

The thirteenth section makes it the duty of the Attorney General of the United States to institute proceedings to escheat to the United States the property of corporations obtained or held in violation of section three, of the act of July, 1862. The proceeds of such escheat to be applied to the use and benefit of common schools in the Territory.

The fourteenth section regulates proceedings in such cases.

The fifteenth section disapproves and annuls all laws of the legislative assembly creating or continuing the Perpetual Emigration Fund Company, and dissolves that corporation.

The sixteenth section directs proceedings for the disposition of the property and the assets of the Emigration Fund Company. All such property in excess of debts and lawful claims, is to escheat to the United States for the benefit of common schools in the Territory.

The seventeenth section disapproves and annuls the act of the legislative assembly incorporating or providing for the Church of Jesus Christ or Latter Day Saints, and dissolves that corporation. It makes it the duty of the Attorney General of the United States to institute legal proceedings to wind up affairs of that corporation.

The eighteenth section makes provision for the endowment of widows, who are to have one-third of the income of the estate as their dower.

Section nineteen gives the President the appointment of a Probate Judge in each county.

Section twenty makes it unlawful for any woman to vote in any election, and

annuls the acts of the legislative assembly which permits female suffrage.

The four next sections make provisions as to elections, and require of voters an oath of affirmation to support the constitution and obey the laws, especially the anti-polygamy act of March 22, 1882, and this act.

Section twenty-five abolishes the office of Territorial Superintendent of district schools, and makes it the duty of the Supreme court of the Territory to appoint a commissioner of schools.

Section twenty-six gives to all religious societies, sects and congregations the right to hold, through trustees appointed by a Probate court, real property for houses of worship and parsonages.

The twenty-seventh and last section annuls all Territorial laws for the organization of the militia, or for the creation of the Nauvoo legion, and gives the legislative assembly of Utah power to pass laws for organizing the militia, subject to the approval of Congress. General officers of the militia are to be appointed by the Governor of the Territory, with the advice and consent of the council.

#### A Niggardly Appropriation.

The bill appropriating money for the State Agricultural college the next fiscal year amounts to \$15,963, as follows: For building improvements—enlarging chapel, seating and repairs to same, thirty-five hundred dollars; inside blinds for college hall, thirteen hundred dollars; finishing attic for college hall, one thousand dollars; for coal, cellar and scales, seven hundred dollars; for general repairs, one thousand dollars; for expenses in completion of building, thirteen hundred and sixteen dollars and eighty-one cents; for sundry expenses and care of fund and lands, two hundred and forty-seven and 64-100 dollars; for library, one thousand dollars; for cases for collection in general museum, one thousand dollars; for cases for mineralogical cabinet, six hundred and fifty dollars; for physical apparatus, five hundred dollars; for entomological cabinet, three hundred and fifty dollars; for experiment, fencing, and apparatus in the farm department, five hundred dollars; for apparatus and experiments in the mechanical department, five hundred dollars; for apparatus and cases in the department of physics and engineering, one thousand dollars; for apparatus and cases in the chemical department, one thousand dollars; for apparatus and experiments in the zoological department, two hundred dollars; for the salary of loan commissioner, three hundred dollars.

The thing to which we desire to direct attention is the small amount appropriated for experimental work on the farm and in the shops. "For experiment, fencing, and apparatus in the farm department, five hundred dollars." Out of a total appropriation of nearly \$16,000, only \$500 go to experiment and fencing and apparatus in the farm department. Why not make it fifteen cents? An equal amount is appropriated for apparatus and experiment in the mechanical department. Wonder if the Legislature will ever understand that the farmers of the State are entitled to more practical benefits from the college farm than they are getting, and that the needed additional work will cost some money.

"Had we the ear of every young farmer in the Southern States," the *New South* says, "we would say to him, and repeat it over and over again, 'stick to the farm.' Ennoble your calling. Educate yourself for it, and by judicious experiments, close observation and untiring labor and painstaking, make it the source of mental improvement,

pleasure and profit. When we say educate yourself for it, we do not mean education in the schools and colleges, though we think that in these far more attention should be given to the branches connected with agriculture. We mean that the young farmer should, by a judicious course of reading and thinking in the intervals of labor, acquire the intelligence that is indispensable in his calling. Let him read attentively short elementary works in geology, chemistry and plant physiology. The necessary books can be got for not more than two dollars."

#### Inquiries Answered.

GRASS ON GUMBO.—Will it pay to save tame grass seed on thin ground or on gumbo?  
—No. Grass requires good soil, rich, deep and clean.

HOT-BED—SWEET POTATOES.—I would be very thankful to you if you would give me instructions how to make a hot-bed, and would it do without glass over it? and when is the time to put sweet potatoes in the bed?

—You will find directions for making hot-bed in another part of the paper—in the department Horticulture. Sweet potatoes may be put in the hot-bed any time after the 25th of March.

WELL TILING.—The inquiry and answer in our last issue concerning the making and use of tiling for the curbing of wells, brought a letter from S. A. Burngarner, of the Brick and Tile Works at Paola, Kas. He says: "I never have sold any tiling for that purpose here. They do well if you finish your well and then let your tile down by getting tiling true and a little smaller than hole in well, so when going down it will not stick if the hole has not been drilled round. I have heard of none larger than ten inches for that purpose, being used for dug wells, two, three or more feet long. Brick burned hard are best for walling wells."

#### Book Notices.

SUGAR-MAKING.—Prof. H. W. Wiley's report of experiments in the manufacture of sugar from sorghum and sugar-cane at Fort Scott last year is out. The substance of this report was given to our readers last October, so it need not be further stated.

THE SUGAR BUSH.—This is a forty-one page pamphlet descriptive of the sugar maple tree and of the art of maple sugar making, two interesting subjects to many of our Northern and Eastern friends. Written by A. J. Cook, and published by A. I. Root, Medina, Ohio. Price by mail 40 cents.

AGRICULTURAL COLLEGE REPORT.—The fifth biennial report of the regents and faculty of the Kansas State Agricultural College, just issued, is full of interest to Kansas people. It contains a full statement of the work done at the college, and on the college farm, showing what the institution is doing and how it is being done. Some especially valuable reports of farm experiments are presented. These relate to stock feeding and to the planting and culture of seeds and trees. The laws of Congress and of the State Legislature concerning the college up to the present year are included.

#### A Lucky Man.

"A lucky man is rarer than a white crow," says Juvenal, and we think he knew. However, we have heard of thousands of lucky ones, and we propose to let their secret out. They were people broken down in health, suffering with liver, blood and skin diseases, scrofula, dropsy, and consumption, and were lucky enough to hear of and wise enough to use Dr. Pierce's "Golden Medical Discovery," the sovereign blood purifier, tonic and alterative of the age.

#### Everybody Likes It.

Any person sending fifteen cents to the Advertising Department of the Wabash Route, St. Louis, Mo., will receive by return mail a handsome, well-bound book, entitled, "Social Amusements," containing all the latest and most novel Parlor Games, Charades, etc. The best publication ever issued for anyone giving an evening party.

#### Great Special Offer!

Two important weekly papers for the price of one paper. The KANSAS FARMER, price \$1.50 a year, and the Topeka *Weekly Capital*, price \$1.00. Both papers for \$1.50! This offer holds good only until March 1, 1897.

## Horticulture.

### On the Pruning of Trees.

At the outset it is easy to conclude that the pruning of both fruit and shade trees is a practice much neglected and abused. Many orchards consist of trees so dense with brush as to shut out the light and sun from the interior of the heads, causing the fruit to be both small and of a poor quality. In others the pruning has been done to excess, and with poor judgment, leaving the trees trimmed up with long weak trunks, or else to be one-sided.

That which is true of orchard trees in the last respect named, is no less true in many cases in the pruning of street and shade trees to have high trunks—in itself a thing quite desirable. As to these, hardly any sight is more common than that of maple and other trees, badly mutilated, not only in over-severe cutting, but by the wretched practice of leaving limb stumps from a few inches to a foot long. Such treatment inevitably leads to unsightly imperfections on the trunks, and worse yet, to heart decay and premature death.

To have a standard fruit tree so open throughout the top as to be accessible both to sunlight from the outside and to the person who picks the fruit from the interior is an important end to secure. So in the case of shade trees, it is to be clear of branches and foliage for at least ten feet from the ground, and also that undue closeness throughout the head be prevented. But such desirable ends can be reached and to the best possible advantage, without, in any case, ever pruning a large branch, and to this subject we shall now devote attention.

The secret of this matter is, to begin the pruning rightly and at the right time, namely, on the young tree just from the nursery, and then conduct all pruning as nearly as possible on the principle of never cutting a branch that is larger through than a man's thumb. This might be styled the thumb-gauge system of pruning trees. Let us first, in its application, take the case of an apple tree. What we want to secure in this is a healthy, prolific tree, having a well-balanced head and the best possible form for admitting light to all parts of the interior, without even sacrificing one large branch in the pruning. We start off on the basis that all trees need pruning at the time of transplanting, to offset the "pruning" the roots received in the process of digging. At this first pruning is the time to lay out with great care the frame of branches of the future tree. A study of the head is made and about six of the leading shoots, starting out in different directions at about an equal distance apart, are chosen for the future ground work. All the other shoots are to be cut entirely away. The reserved ones also need, as shown, cutting back about one-half.

With foundation branches thus provided, the future pruning should be directed for their preservation and development, seeing year by year they become amply, but not too densely, furnished with branches. Being guided by the thumb gauge in pruning, by going over the tree annually its form may with light work be controlled, and the tree never brought to suffer cutting so severe as to greatly tax its vitality. Indeed on this plan much of the pruning could be done in the summer, by the mere rubbing off of such shoots as appear where they are not wanted.

With shade trees the same rule of early providing a frame work of branches, and then pruning by the thumb gauge should be aimed for. Here there may often be more difficulty,

because the branches of such trees as they come from the nursery are seldom as high as ten feet from the ground for the lowest ones. One then should wait for the growth of new branches farther up, to be treated as the permanent ones, in the meantime cutting the larger ones—those as large as a thumb—and leaving some that are smaller, temporarily along the trunk, to excite activity of growth and development in those parts. As any of the latter reach the thumb size, let them be pruned completely away, and finally when the frame branches above are established, all such lower ones should be removed.

Beyond getting the frame work of street and shade trees thus started well up and on the thumb gauge system, little if any systematic training is needed for these. Certain kinds may grow very dense and would be better off for some interior thinning. Others, like the Silver Maple, often produce long slender branches that should be headed back occasionally to induce greater compactness. Still, in pruning any trees of this class, the distinct character of the growth of each kind should never be much interfered with, although it may at times be modified with benefit.

Most of the foregoing directions apply to trees in which a right principle in pruning was applied from the time they were small. But, as already stated, trees without number exist which are now in bad shape from lack of good treatment as to this. While our directions thus far will serve to give an idea of what is desirable as the end of all standard tree pruning, some general remarks will now be advanced to apply to all work in this line.

First of all, let tree pruning of every kind be looked upon as a mere expedient to certain desirable ends, such as directing a better form, forcing vigor into certain parts by removing others, but at the same time, as one in itself tending to impair rather than increase vitality. While a thrifty tree, vine or plant may bear a good deal of pruning, if this be confined to green shoots or young branches, with general benefit, the taking off of large branches should, as a rule, be looked upon as a severe tax on life. When therefore a tree for any reason requires heavy pruning it should not all be done at once, but through several years.

While at any time between leaf-fall and the starting of new leaves is a suitable season for general pruning, heavy branches should not be removed previous to or during the colder weather, as the lack of their shelter and the presence of large wounds, renders the tree more susceptible to injury from cold. Wait with pruning such until towards spring.

The place to cut a branch, large or small, is just where the swelling at the base begins. Then if the surface be heavily coated with paint of good body, to keep out air and moisture, the scars will, in vigorous trees, Lark completely over in the best possible manner. To leave, in pruning, stumps of any length is a practice as abominable as it is without excuse; the presence of such entirely prevents the healing up the wound, while the old wood must in time decay, leading to an opening into the heart of the tree, as alluded to before.

A sufficient cause for the cutting of a branch should be found if it is dead or dying (such being in a great degree exhaustive to the tree), or if it chafes or crosses another branch, or if detracting badly from a proper balance of parts, or if its absence is required for admitting sun into the tree, or to allow the picker of fruit to move readily among the branches.

In pruning to regulate general symmetry, one should be careful as to the

position of the last remaining bud or branch of any part. If the growth in general is too upright, cut back to buds or branches that point outwards; if too spreading, to such as point upwards or inwards. Long pole-like branches should be guarded against.

Let it always be remembered that the object of pruning is to give direction to growth, not to promote it. For promoting growth dependence should be had on cultivation and top dressing with manure.—*Popular Gardening, Buffalo, N. Y.*

### How to Make a Hot-Bed.

If the ground is well drained naturally, dig a pit for the bed; if the ground is not drained, so that water would settle in the pit, the bed must be made above ground.

Make the dimensions to suit your taste, a bed three by twelve feet is a convenient size. Dig the pit a foot or eighteen inches deep and about a foot larger each way than the bed is to be. For a bed three by twelve feet, dig the pit four by thirteen feet. Fill the pit with stable manure. Fresh horse manure is regarded as the best, though any barnyard manure, fresh or old, wet or dry, that will produce heat when properly treated will do. Spread the manure evenly in the pit and tramp it down firmly; make it as compact as possible in every part. Fill up to a few inches above the surface of the ground. Tramp or pound frequently, so as to get the manure as solid as it can be made conveniently. Then set the frame on the manure. The frame consists of two twelve-foot boards, one about six inches wider than the other, and two three-foot boards for the ends. Nail together so as to have the frame strong; let the wide board be on the north side, then the cover will slope to the south. In setting the frame, put it in about six inches from the edge of the manure. Then bank up earth all around the bed on the outside to within a few inches of the top, and fit in two rests across the bed, at equal distances from the ends, (dividing the frame into three parts,) to let the cover rest on. The rests need not be put in place until everything is ready for the cover. Then throw some water on the manure, every part of it, so as to wet it thoroughly and start fermentation to produce heat. Now fill in about six inches of rich, fine earth, with a little sand in it to insure looseness. Put on cover and let alone until the ground is warm, when planting seeds may be begun.

The cover may be made of plain muslin dressed with boiled linseed oil. Tack one edge on the back board of the frame, tack a light strip on the other edge, as long as the frame, to hold the cover in place and to assist in uncovering by rolling up over the rests. The oiling can be done when the cover is stretched the first time.

Be careful about the temperature. If the heat becomes too great, roll up the cover enough to lower the temperature, and don't begin to plant until the temperature is about right, which can be easily ascertained by raising the cover and putting the hand inside.

When the soil becomes too dry it may be sprinkled with warm water.

After seed has been sown in the bed, care must be taken to keep the temperature and moisture right. When the weather is cold the bed must have additional covering, and on bright warm days, the cover should be raised a little to ventilate and to let sunshine on the young plants.

To prevent the splitting or bursting of cabbages, J. J. A. Gregory recommends to go frequently over the ground and start every cabbage that appears about to mature, by pushing them over sideways. Heads thus started are said to grow to double the size they had attained when about to burst.

### Currants for Health.

I shall not lay stress on the old, well-known uses to which this fruit is put, but I do think its value is but half appreciated. People rush around in July in search of health; let me recommend the currant cure. If any one is languid, depressed in spirits, inclined to headaches and generally "out of sorts," let him finish his breakfast daily for a month with a dish of freshly-picked currants. He will soon almost doubt his own identity, and may even think he is becoming a good man. He will be more gallant to his wife, kinder to his children, friendlier to his neighbors, and more open-handed to every good cause. Work will soon seem play and play fun. In brief the truth of the ancient pun will be verified that the "power to live a good life depends largely on the liver." Out upon the nonsense of taking medicines and nostrums during the currant season! Let it be taught at the theological seminaries that the currant is the "means of grace." It is a corrective, and that is what average humanity most needs.—*E. P. Roe, in Harper's Magazine.*

It is thought by many that a new orchard will not be successful on the ground that was occupied by an old one, but if the old orchard was a good one, there is no reason why a new one in the same place should not be. There is no such exhaustion of the soil by trees as there is by continually cropping with one kind of grain, and the fact that one orchard has been a good one on a piece of ground is fair reason for thinking another will be. If the old orchard has been well cared for and failed it is better to select a new site. If the old orchard has failed because the trees have been neglected or through lack of cultivation, a new resolution by the owner to take care of the new trees is better than a new site for the orchard. Ten trees are ruined in this way where one is lost through poor soil.

\* \* \* \* Decline of man or woman, prematurely induced by excesses or bad practices, speedily and radically cured. Book (illustrated), 10 cents in stamps. Consultation free. World's Dispensary Medical Association, Buffalo, N. Y.

### Hedge Plants by the 1,000,000

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Send five 2-cent stamps for my new *Small Fruit Manual*, with prices of plants for 1887. It is a complete guide to small fruit culture, with illustrations of old and new fruits. B. F. SMITH, Lock Box 6, LAWRENCE, KANSAS.

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A full line of Nursery Stock, Ornamental Trees, Roses and Shrubbery. We have no substitution clause in our orders, and deliver everything as specified. 220 Acres in Nursery Stock.

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### WHAT I WOULD DO!

I would send for our free Descriptive Circular—"Fifteen Years Among the Trees and Plants of the ROCKY MOUNTAINS and the WILD WEST," and learn all about the most beautiful and hardy EVERGREENS on earth, of plants valuable for fruit, for medical uses, and for rare and beautiful flowers. Address D. S. GRIMES, Nurseryman, DENVER, COLORADO.

### The Poultry Yard.

#### A Mistake Corrected.

In my article on "Turkeys on the Farm," you make me say "\$3," when it ought to be \$13, as a "big price." Rather inconsistent with prices given for pairs, in my card in the FARMER.

Respectfully, W. H. BIDDLE.

#### Prize Offered for Article on Chicken-Raising.

Kansas Farmer:

We will offer to the lady writing the best article on the "Care of Little Chicks," for publication in KANSAS FARMER, during February, March and April, a setting of either Plymouth Rock, Spanish, Brown or White Leghorn, Buff Cochon or Light Brahma eggs.

HUGHES & TATMAN.

North Topeka, Kas.

#### A Query.

Kansas Farmer:

I have some fine Plymouth Rock chickens; have a good warm sod house, new and clean; feed them chopped corn and oats, mixed, after scalding it every time and letting it cool before feeding. I burn bones and feed to them; also feed some sand and egg shells and give them plenty of water. One of my hens was found one morning in a hard spasm and died in a few minutes. When I dissected her I found her liver was about five inches long and four inches wide; had not eaten anything for some time. The other day another one died the same way, but when dissected she looked as natural as any chicken I ever dissected. Can you tell me what is the matter and what I should do, providing any more should be taken ill, or to prevent any such?

S. H.

Federal, Hamilton Co., Kas.

[It would hardly be safe to risk an opinion on so brief a description. Who can help our friend?—EDITOR.]

#### How to Make a Hen House.

As a poultry house, both for winter and summer, nothing is superior to one partially under ground. For one hundred fowls 10x50 feet is a good size—this in three apartments, one on each end ten feet long. In each of these small rooms are to roost fifty hens, as by not allowing all to come out at the same opening they may be fed to a better advantage on winter mornings.

The center room is to be used as a hatching house in summer, while in it, in winter the hens may be confined on the coldest days. Here have the dust bath, the gravel box, bone trough and nests.

The nests should run along the back wall, on the floor, but so constructed that the eggs will not roll out. That the hens may not sit on the top of them nor be tempted there to roost, have a slanting board above. Let the whole frame be movable, so as to be easily cleaned.

In this room have three windows. In summer the glass may be taken out and replaced with wire screens. Let the door be sliding, but kept closed except when needed by the owner. In winter cover the floor with chaff in which to throw the grain eaten by the fowls.

The roosting houses need no light, except what will come through the door from the center room. Ventilate by a wooden pipe, running from the floor, thereby avoiding draughts.

The roosts may be best hung from the ceiling. Place just underneath a sloping wooden trough to catch the droppings. lest the fowls scratch among them. This trough should open outside by means of a hinged board, which can be raised or lowered at will.

From these rooms the means of exit

to the outside need be but a square hole, large enough to admit a hen. Better three feet high than lower that dogs may not enter.

In addition, a shed, open to the south, closed on the east and west, is quite convenient, as the hens will thereby have more scratching room when snow is on the ground.

Such a house, made half under ground, low at the back, higher in front, the boards lined with tarred or manilla paper, need cost but very little. Provided with a good wind-break from our western zephyrs, and judiciously fed, hens, so quartered, if of a laying strain, will stop laying but one time during the year—this during the moulting season.

Never make a chicken house in the cow corral, but on good clean ground that can be fenced specially for the poultry. Then plow up the run once or twice a year and seed it to grain or grass.—Exchange.

Send stamp for sample of sea shell for poultry, and a fine illustrated circular of poultry. HUGHES & TATMAN, North Topeka, Kas.



How to Cure Skin & Scalp Diseases with the CUTICURA REMEDIES

TORTURING, DISFIGURING, ITCHING, scaly and pimply diseases of the skin, scalp, and blood with loss of hair, from infancy to old age, are cured by the CUTICURA REMEDIES.

CUTICURA RESOLVENT, the New Blood Purifier, cleanses the blood and perspiration of disease-sustaining elements, and thus removes the cause.

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Malarial Regions, will find Tutt's Pills the most genial restorative ever offered the suffering invalid.

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**The Veterinarian.**


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

**GREASE HEEL.**—Please inform me through your veterinary department of a sure cure for "grease heel." One of my horses has been troubled with this disease for a year. [This disease is characterized by a most unpleasant odor, due to the formation of vesicles and pustules on the skin at the back part of the heels and fetlock. It is scarcely ever met with in vigorous horses which are well cared for. Undue exposure to cold and wet and bad stable management are the usual causes, especially in subjects with a constitutional tendency to the disease. If the patient appears in ill health he should have an entire change of diet and should be comfortably housed and clothed. He should have a mild cathartic, and this should be followed up by a course of tonic and diuretic medicine. As local treatment the parts should be kept clean by gentle bathing with tepid water and dusting with dry oxide of zinc. If the odor is very unpleasant use occasionally a lotion made of carbolic acid 2 drachms; water, 12 ounces.]

**MEMBRANE IN UDDER.**—A cow has just dropped third calf. When first calf was dropped, no milk came from right fore teat, though that quarter of the udder was full. The opening is all right, but a membrane prevents milk from reaching the teat. Each time she has calved that portion of the udder fills, and before it dries up we have trouble to keep it from caking. With first calf, we made an effort to get milk by puncturing membrane with knitting needle. The membrane was tough, and when needle passed through caused her considerable pain; we got a few drops of milk, but in a few hours we could not only get no milk, but could not find the hole. Fearing such irritation might produce trouble, we did not try again, but rubbed that quarter with lard and camphor to keep down swelling and drive milk away. Could membrane be punctured to secure permanent opening? If not, what is the best course to pursue to drive the milk away from that part of the udder and still not affect the general flow? [Never use a knitting needle—very dangerous. You can obtain an instrument opening such obstructions which will do for your lifetime. This should be inserted, and a milk tube used to draw the milk, and at last when milking is over put a lead probe in teat and keep it there until next milking, when it is to be withdrawn and the tube put on—and so on.]

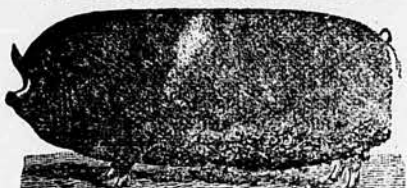
**ITCH, MANGE, SCAB, ETC.**—There is a flock of sheep in Spink county, D. T., that last fall while being herded were surrounded by a prairie fire. To save them they were driven to the top of a hill where there was little or no grass. There the fire ran along the grass, under their bodies. A half dozen were burned, and died from the results. The balance lived, were in good condition, but since have been affected with an irritation of the skin, rubbing themselves, and are losing their wool. The disease has been called "scab." What is the pathology of scab, and what is the treatment? Is not the above condition of the sheep the result of excessive heat? [Scab in sheep, mange in horses, and itch in men, are all one and the same, and due to the same cause, viz., the presence on the skin of an itch parasite known as acari. The first and most prominent symptoms of scab is itchiness, which soon gives the animal a ragged appearance, tufts of wool being pulled out, leaving bare patches. If the skin is closely examined at these places a small reddish pimple will be noticed, on the surface of which a small blister or vesicle forms. Close examination may discover the insect in the vicinity. Under this irritation the sheep becomes exceedingly restless. It rubs itself against trees, fences, and rocks, and bites and scratches itself with feet and teeth. The scabs are torn off, sores form and extend, the appetite is lost, the fleece is ruined, and the animal dies, worn out with the increasing torment. Treatment:—For sheep with heavy fleece, baths are very efficient; the following example will neither stain the wool nor materially endanger the sheep: Tobacco, 16 pounds; oil of tar, 3 pints; soda ash, 20 pounds; soft soap,


4 pounds; water, 50 gallons. Boil the tobacco and dissolve the other agents in a few gallons of boiling water; then add water to make up to 50 gallons, retaining a temperature of 70 deg. Fahr. This is sufficient for fifty sheep. Each sheep is kept in the bath for three minutes, two men meanwhile breaking up the scabs and working the liquid into all parts of the skin. When taken out each sheep is laid on a sloping drainer and the liquid squeezed out of the wool and allowed to flow back in the bath. A second, and even a third bath may be necessary in inveterate cases.]

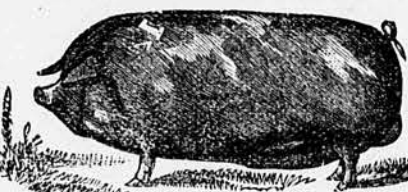
 Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Cattle, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. GIBBONS & Co., West Chester, Chester Co., Pa. Send stamp for Circular and Price List.


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

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 As produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 700 pigs in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 160 sows and 10 males we are breeding from. Our breeders are all recorded in American P.-C. Record. Pigs all eligible to record. Photo card of 43 breeders, free. *Science Journal*, 25 cents in 2-cent stamps. Come and see our stock; if not as represented we will pay your expenses. Special rates by express.

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In connection with Mr. G. M. SEXTON, Auctioneer to the Shire Horse Society of England, Importers and Breeders of English Shire (Draft) Horses RED POLLED CATTLE and LARGE YORKSHIRE PIGS, Have a very choice collection on hand to be sold cheap. Correspondence solicited. 34 East Fifth Street, TOPEKA, KANSAS.




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 I have a choice collection of pure-bred Registered Imported Clydesdale Horses on hand and for prices away down. Terms made very easy. Each Stallion guaranteed a breeder. Send for Catalogue. JOHN C. HUSTON, Blandinsville, McDonough Co., Ill. A. B. McLAREN, Superintendent.

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**ENGLISH SHIRE HORSES.**

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There is an entire family living in Brooklyn who make a living by posturing for local artists.

A sample copy of the Normal Advocate sent free to any one. Address Normal Advocate, Holton, Kas.

Clean cultivation is essential to good crops. This often takes work, painstaking, tedious hoeing and weed-pulling.

As soon as a crop appears above ground it needs cultivation, both to kill the weeds and to admit air to the roots of the plants.

The New-York Experiment Station has succeeded in raising cabbages from leaf cuttings. It has also raised some fine cabbages from seed gathered green.

It was the illustrious Lord Bacon who expressed the opinion that "gardening is the purest of human pleasures and the greatest refreshment to the spirit of man."

Itch, Prairie Mange, and Scratches of every kind cured in thirty minutes by Woolford's Sanitary Lotion. Use no other. This never fails. Sold by Swift & Holliday, druggists, Topeka, Kas.

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Stewart's Healing Cream, for chapped hands, face, or gentlemen to use after shaving. The cheapest and best article for the purpose in the world. Please try it. Only 15 cents a bottle at drug stores.

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of health is to be found in Dr. R. V. Pierce's "Favorite Prescription," to the merits of which as a remedy for female weakness and kindred affections thousands testify.

A toad put into a hot-bed will effectually protect the plants from the ravages of insects, and a number of them in an ordinary garden will materially reduce the number of insects, and thus in a measure protect the plants from their ravages.

If any family will, for a season, keep an account of the products used from their garden, at the price at which they are furnished at the nearest grocery, they will certainly be astonished at the amount they have saved, aside from their increased freshness and quality.

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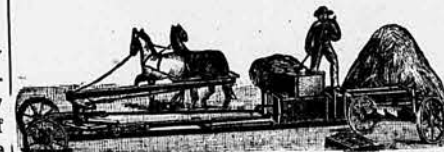
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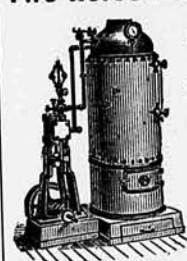
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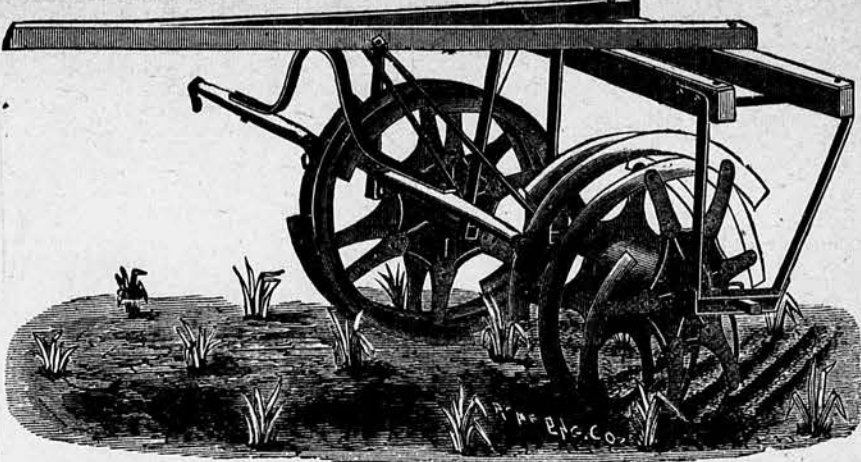
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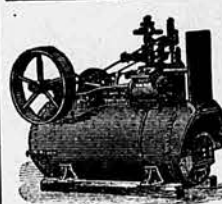


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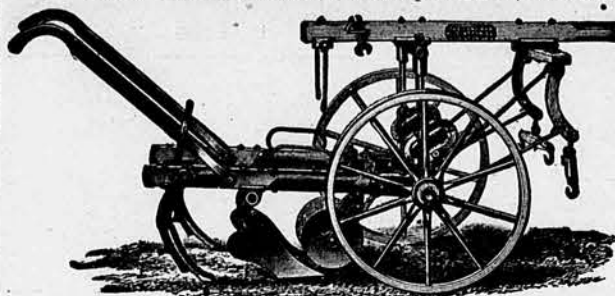
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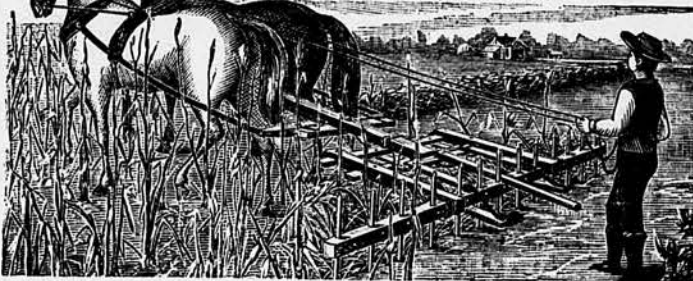
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