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Tree Experience.-No. 3.

BY B. P. HANAN.

In the spring of 1876 I set out ferty-three pear trees one to four years from the bud, consisting of Bartlett, Flemish Beauty, Belle Lucrative, Beurre d' Anjou, Howell, Nainvea Poiteau, Osborne's Summer, Shedden and White Doyenne. They were all (but eight) budded on pear. The eight excepted were on European mountain ash, one year from the bud. All the other trees were two to three years old, except ten Bartletts and six Flemish Beauties, which were three to four years old.

The most of them lived, although set out or the first day of May, for I had just got my nursery stock home on April 29th. I had brought the trees from my old nursery at Clark City, Missouri. They were of the remnants which were left of my spring sales of all salable trees which lived through the hard winter of 1874 and 1875, except the eight on mountain ash

which were then in bud. In the spring of 1877, a prairie fire burned my stables, crib, poultry house, a large quantity of hay, and other comubustibles; and, as they stood near my orchards, the hard southwest wind, (which was as hard as I ever saw in planted, in the missing places, good, nice trees two years old. The replants were Bartletts, Easter Beurre, Clapp's, Lawrence, and Visorall dwarfs, and the following standards: Brandywine, Clapp's, Flemish Beauty, and Lawrence. Eleven of these either failed to start to growing or died during the heat of summer, and were replaced last spring by dwarf Bartlett, Duchess, Louise, Bon de Jersey, Beurre d' Anjou and Tyson; and this latter replanting

I should have stated, at first, that the pear orchard is on land by my other orchards, and the description of soil and the preparation, as given for my apple and peach orchards in previous articles, is applicable to all my orchards. The trees have grown about as the apples have, and have shown no signs of disease since becoming fully established. Some of the dwarfs have bloomed twice, but have matured no fruit. Last year a late freeze killed them and most all my other young fruits.

partly failed on account of the drouth last year.

CHERRIES. Richmond or Early May of same, 2 years old; before them any but the most powerfully con-24 English Morello, 2 years old; 7 Gov. Wood; structed dams. Such a system of dams would 11 May Duke, 2 years old, and 6 common sour Morello spreuts. All the Gov. Woods but one amount than would suffice to plow up the entire were killed by the fire, and so were a few of the sod, or all that could be reached by plow and others. The cherries have grown well and team. The plow would create a vast system of show no signs of disease. The Early Rich- reservoirs that would exert a much more benemonds and English Morelloes began to bear in ficial influence on the climate and rainfall than 1878, and had on young fruit last spring, when dams, the most numerous and extensive that the late freeze came and killed the most of it. could be constructed. PLUMS.

I set out, the same spring, 60 plum trees, 1 and 2 years old; 24 Miner and 6 Wild Goose, on own roots, and 6 Wild Goose on peach. These have all done well. I also set out Bukler, Coe's Golden Drop, Damson, German that has had such beneficial results in the east-Prune, Green Gage, Imperial Gage and Lombard, 2 years' stock, grafted on wild plum stocks. They have done poorly. The gages and prunes are the best trees; they outgrow the stock. I believe they would do better on peach or a faster growing stock. No disease in my plum trees. Langdon, Reno Co., Kansas.

The reader of these very interesting articles of Mr. Hanan's on "Tree Experiences," will have doubtless remarked the havor which tier settler would not be afflicted with such sedrouth and hot sun's have played on the young, newly planted trees. Would not a heavy mulch of straw-partially rotted-hay, or prairie grass, in a great measure have counteracted the influence of the summer heat and dry weather ?- [ED.

Another Theory for Increasing the Rain Fall on the Prairies

The extreme dryness of the past season in western Kansas, brings the query to the minds of the inhabitants in these western counties, the quickest way by which they can increase the though I have sent to me a large number of rainfall. Therefore it is that I take the liberty to present to your readers the novel idea of a

natural mode of irrigation. The greatest troub- have long made a specialty of refrigeration and qualities in air transmitted are chemically ar- the same subject, and when that subject demands there is so small an amount of land under culrainfall that we naturally get. This country is appear. at such an elevation that nature has formed off the surplus water that falls, and with the heavy fall there is to the ravines, the water is soon on its way through streams and rivers to the Gulf of Mexico.

Now the question comes up, How can we retain the rains that we get, so as to increase the rangements by which I can avail of both for use natural rainfall? I have long entertained the idea, that by damming these draws up, it would ventilation, which arrangement I have comremain here in ponds to be evaporated by the atmosphere to be taken to the clouds to come all parts of the country. Your readers are back to us in gentle showers, giving us more showers with a moister atmosphere, and less hot of sub-earth ventilation, and with your permiswinds, transforming it into a wonderful agricultural district. This could be done before the land could be brought under a proper state of cultivation with but very little labor.

As every section of land has one or more himself; or a law might be passed making the road overseers build a dant across every crossing, which could be done at little expense, and would produce in a short time a great climatic change. These could be so constructed as to make the crossing on the top of the dam by over with stone, letting the water through when they become full, thereby making the roads in Kansas,) blew the intense heat so far into the a better condition for travel. These, construtorchards as to kill many of the trees, and all of ed every mile or half mile, would hold nearly my pear trees but nine. I immedirtely trans- all the water that falls. And the more water that is retained in any country, the more water the soil, the more water would be absorbed in the earth, lessening the amount of water to be distributed in the ravines and streams, holding it at a proper equilibrium, thereby giving us a vast natural i. rigation. These dams and ponds I imagine, would be no detriment to the health of the country, for the water would be taken up by the atmosphere and come back to us in a purified state, purifying these vast reservoirs and holding them over until they could again be formed into rain. C. F. B. Spearville, Ford Co., Kan.

Our correspondent's theory of increasing the rainfall on the dry plains, or rather, more evenly distributing it through the season, is not altogether new. But he seems to underestimate the expense of such a system of dams. It would require very strong dams to resist the large volume of water which is poured down those "draws" or ravines during a heavy I also set out 96 cherry trees in the spring of thunder storm. At such times canyous are con-1876: 1 Belle de Chaisey, 2 years old; 47 Early | verted into roaring torrents, that would sweet cost immense sums of money, a far larger

> No. The system of dams is not practicable, and would exert but a comparatively small influence on the climate if they were built. The have to be effected by the same gradual process ern and middle portions of Kansas-settlement and cultivation. Emigration moves too rapidly and pushes too far out on the frontier. If it could be induced to move on no faster than the country could be settled up with a reasonably numerous population, who would break up large areas of wild prairie stretching north and vere droughts, as they have been subjected to the past year. But our enterprising people will not be restrained, but will continue to go forward and battle with difficulties as they have done from the Missouri river, to finally triumph over the numerous obstacles which always environ the pioneer.

Refrigeration and Ventilation.

, ED. FARMER: Owing to the itinerant nature others, I miss the FARMER.

I have spent the period last named in the draws or ravines, for the purpose of carrying northwest, but I have practiced in fourteen states of the Union, and having learned in November last of the introduction of two new processes that are really marvels of efficiency, and of inestimable value, I came on here and have spent my time in investigating both, and in arindependently or in conjunction with sub-earth pleted, and am engaged in introducing them in quite familiar with the efficiency and usefulness sion I will acquaint them with the new systems.

I find each to possess peculiar respective characteristics that adapt them to uses and circumstances where sub-earth ventilation cannot be availed of, and one of them excels it and all draws on it, the owner of the land could do it others yet discovered for low refrigeration, but illy effected, and the results attained are all that both may be operated on land most economically in conjunction with sub-earth ventilation. yet may serve admirably alone for certain purposes, under certain circumstances, which I will describe. One is called the "Rankin Refrig- all requirements so fully that the board of suerating Process." It is particularly valuable, placing a flue nearly to the top and arching and is adapted to use on land, on cars, and on marine vessels. It consists in the alternate distillation and distention of ammonia, which is used in a close, iron apparatus, which is not corroded by the ammonia, and the ammonia may be used with but nominal waste, indefinitely. It has the capacity for manufacturing they will have to retain. Then by cultivating ice artificially more rapidly and at less cost than that on being of less cost and requiring no any other known process, also for cooling air in buildings of any extent down to any degree re- and it will accomplish, on a small scale, as satisquired in the arts, even to 30 degrees below zero, and, as stated, without ceasing.

The process is invaluable for a great variety of purposes, and is highly prized by brewers, meat-packers, manufacturers of lard, oils, candles, glue, confectionery; for creameries, skating-rinks summer gardens or restaurants, public buildings, hospitals, theaters, mines, etc., and perhaps most valuable of all for refrigerating marine vessels. A perishable cargo, by the use of this process may, if necessary, be carried two or three times around the world without decomposition and without the use of ice. It will be obvious to all that its economy can scarcely be estimated on this account, as better refrigeration is secured, and the immense saving of tonnage required for ice storage under the old system, in the use of which the loss by the giving out of the ice, often occasioned damage exceeding the profits on several cargoes. For Kansas and the Kansas Farmer. refrigerating a large ship and cargo, the space required by the ammonia apparatus would hold but a few tons of ice, and but one man is required for operating it. I find that its value is already estimated so highly that the demand far exceeds the facilities for mrnufacturing.

A feature of special interest to a majority of your readers is that this apparatus is as well adapted to use in the tropics as in high latituds, which will, in the early future, attract capital and euterprise to new fields hitherto unavailable in many of the most remunerative arts.

As evidence that such results will soon obtain, I would state that enterprising men here climatic change on the still parched plains, will are already discussing and investigating the most promising branches of business, and most eligible locations for establishing enterprises in which the new apparatus can be made most lucrative. "A word to the wise sufficeth "

THE AIR TEMPERER AND PURIFIER.

The other device to which I have alluded, is very efficient and useful, though its refrigerating potency is limited, compared with the process

south across the entire state, there is little doubt have effected in the use of a subterranean airthat the rainfull would be bountifully and even-duct, or by sub-earth ventillation, but in high formation. The morals of the paper are excelly distributed through the seasons, and the fron- latitudes, or wherever air must be taken at a temperature below freezing, the subterranean air-duct is very desirable as an adjunct, as will rious subjects treated. I am a traveling man,

This apparatus consists of a bath of charcoal, ip through which inflowing or injected air is passing simultaneously with cold water, which is perpetually being sprinkled on and is flowing ble articles. I put a high value upon the ideas down through the bath of charcoal, so that all I have gathered from the FARMER during 1879. the current air is forced to make a contact with As I read each number I mark every article I fall wheat. There is a difference of opinion in bath is both mechanical and chemical, and each the paper is read I clip out all the marked artiare potent and reliable. The antiseptic and cles and slip them into an envelope until I reof my vocation and employment, your journal deodorizing properties of charcoal have long turn home, and then paste them in my agriculhas not reached me regularly of late, and al- been conceded, as also has the necessity of con- ral scrap book and index them. Sometimes I tact to secure efficiency in air-tempering.

It will be apparent to the 'reader that these

le with these extreme western counties is, that ventilation, and that I have for the past four rested, and floating substances, such as smoke, my practical attention every article will be reyears devoted my time to those arts, hence any soot, pollen, and the like, are mechanically ar- read, and my action will be controlled by argutivation, and the natural prairie being so hard new developments in either are hailed with joy rested by contact with the percolating water. ments and results given whenever my judgment that the country does not retain the amount of and availed of and applied by me as they The apparatus is usually placed in a cellar for approves sufficiently, and then when I become tempering and ventilating buildings, and the a granger how valuable will these scraps be? water used may be obtained from a contiguous duced to the minimum.

It is desirable to use water about 50 degrees tic arrangement of the apparatus, and the regulation of the volume of supply and exhaust, incoming air may be perpetually given about the same temperature as the water used. This apdairies or small dwellings as is sub-earth ventilthe water and run a fan for forcing the air through the bath, through the apartments, and out of the buildings through a suitable exhaust shaft, all of which has been proved to be readcan be desired. This process of tempering air and ventilation has been used in a large court room in the King's county court house, in Brooklyn, N. Y., nearly a year, and it has met pervisors have recently ordered it to be introduced into all parts of the building, which work is now in progress.

It is adapted best to buildings of proportions so large that the use of power can be afforded for pumping water and running the fan for forcing the air through the bath and the building. For smaller jobs of ventilation, sub-earth venpower, water, pump, or fan, may be availed of, factory results for tempering and ventilating human abodes, and houses for brute animals, as any other; but the purifier is adapted to use in very large buildings, and in cities where subearth ventilation is not always practicable.

Neither of the last two processes described, i. , the purifier and sub-earth ventillation, are capable of refrigerating lower than from 55° to 60°, in adapted buildings, but the Rankin refrigerator is equal to the lowest temperature ever required in the arts, hence we now have in the trio what fully meets all requirements, and a realization of what has been so long and so diligently sought by scientists of all civitized countries. Each is an acknowledged boon, and the three leave little to be desired for the purposes at which the respective inventors aimed J. WILKINSON.

ion of an Enthusiastic Friend.

Last year I visited Kansas and was so much pleased with its natural resources, beautiful climate, and intelligent citizens, that I purchased a quarter section in Shawnee county, near Pauline, with expectations of locating on it one year hence. Last October I took my wife to Topeka and our Kansas property and she was so much pleased with the growing capital and my land purchase, that we purchased an adjoining quarter, from your live, reliable land agents, Messrs, Ross & MdClintock, I have traveled thousands of miles in Europe and the United States, but never have I seen a better agricultural and grazing country than Kansas was raised in Cambridgeshire, England, hence have seen much valuable agricultural land.

I -rdered a copy of the KANSAS FARMER when I made my first purchase in your state, and duty compels me to acknowledge its merit. Not only is the FARMER ably edited in the various departments of agriculture and stock already described. It accomplishes what I raising, but it contains a vast amount of well selected and able original articles on general inlent, and the Editor has the courage to inform and my wife forwards me each issue of the FARMER, but occasionally a paper fails to reach me, and I am greatly troubled when I lose a number, for every paper contains many valuaboth the water and the coal. The action of the think may be of future service to me, and when find every article on a page marked, These articles will be of great service if I should locate As you and many of your readers know, I are fully secured, hence objectionable gaseous in Kansas. I have several articles treating on

I shall give some attention to sheep and catwell, or by using a driven or excavated well in the raising, and shall want some pure blood the cellar—the most common dependence is on rams and bulls, and for their winter comfort the drive well, the construction or introduction and feeding, I shall likely draw upon Mr. Stoof which has become so general that cost is re- ner and Mr. Anderson's recent articles. Fanny Field has contributed many valuable articles to my scrap book on turkeys, ducks, towls, etc. Fah. in temperature, with which, and an artis- Would like to have seen John inform Fanny that he had purchased her a pair of bronze turkeys. I think I should have been tempted to watch the effect on Fanny. I was glad she sold a boy two improved ducks on credit, and that paratus, it will be obvious, is not adapted to she was kind enough to tell us about the boy's success. Although I am quite forgetful, I find lation, as it requires a motor by which to pump that I could refer to many valuable articles from memory very readily.

I have curtailed my paper subscriptions, but I expect to take the FARMER as long as I own an acre of land in Kansas.

While prosperity is returning and prices are generally going up for brain and skilled labor, the enterprising publisher has reduced the price of the Kansas Farmer twenty-five per cent. Surely every tiller of Kansas soil and every stock owner should take their state organ.

T. W. PECK.

Sorghum Growing in the Valley.

As the question of cane growing is! one that now agitating the minds of our farmers and the public, I will add my experience.

May 12, 1879, I plowed one acre of bottom land, May 15 replowed and planted on the 16th. May 22d replanted, as seed did not come up well. As soon as plants were up a few inches, hoed and pulled weeds, at the same time thinned to four or six plants to the hill. Planted in rows four feet apart and eighteen inches between hills in row; plowed three times with double showel; commenced heading July 20th, September 1st came ripening rather irregular. September 8 to 17 stripped, cut, and hauled to mill twenty-two loads of cane, which made 120 gallons of dense syrup. Variety, one of the Imphee's, name not known; stalks 10 to 12 feet long with a bright red spraggling top, medium size stalks. The syrup is thickly candied with sugar, being difficult to draw. Think ground for cane should be rich and thoroughly cultivated before seed is planted. The Amber is doubtless the best variety for both syrup and sugar, it having been fully demonstrated the past season that a good marketable quality of ugar can be manufactured from this variety of cane, and ere long the north will be exporting,

Rock, Cowley Co., Kas.

Breaking Sod.

I have noticed in several late numbers of the FARMEE men asking for information with regard to breaking prairie sod. When is the best time and at what depth? and also, the best time to sow millet.

I will give you my experience in breaking sed and opening up a new farm. Last spring I had no ground for corn except sod. I went to work with a fourteen inch breaking plow and broke the sod about two inches deep, and followed behind with a twelve inch stubble plow, and threw out four inches of subsoil on top of the sod. I broke and subsoiled about thirty acres, I then harrowed over well and planted with a two horse planter. The result was I had an average crop of corn. Some of it yielding sixty-five bushels to the acre. I broke and sub-soiled five acres for oats, and I had an average crop of oats. I broke ten acres and sowed it to millet. I harrowed the ground several times, then sowed the millet and afterwards dragged the ground over several times with a heavy brush, and as a result I cut three tons of millet to the acre. I plowed the ground for wheat in September and found the sod completely rotted. Sod broke any time from the 10th of April to the 10th of June can be sown to millet, and if the season is favorable will make a good crop, and at the same time putting the ground in splendid condition for regard to the depth of breaking sod. I never break over two inches deep. I think it rots quicker and does better.

The full wheat in this section is somewhat damaged by the severe cold spell is December. The earliest sown appears to be hart the worst. Stock of all kinds look well. T. W.

Shawnee Co., Kas.

farm Stock.

Sheep in Australia.

Some valuable information may be gained by Kansas sheep-breeders from the following article published in the Belfast Gazette, written by a sheep-breeder in Australia:

The want of proper knowledge of sheep man agement leads, in most cases, to the development of wool not only unfit for market, on account of its nondescript character, but tends at the same time to produce unsound sess in the staple. This latter defect is attributable in too many instances to overstocking, and consequent starvation, the herbage being insufficient to produce the necessary amount of volk to nourish the wool. It not unfrequently happens that, after shearing, the sheep are put into poor pasturage. This produces a weak, ill-conditioned growth of new wool, deficient alike in strength and elasticity. As the autumn advances and feed becomes more abundant, stronger and better conditioned wool is produced; this is owing to the improved condition of the sheep. At shearing time, when the fleece is taken off, the slightest pull will detach the sound wool from the unsound, rendering it quite unfit for the comb. Having been a very considerable purchaser of farmers' lots of wool for some years past, I found a great deal of it very slovenly got up, pieces, bellies, and in many instances locks all rolled up together in the fleece. This slovenly system is most injurious to the interest of the wool-grower himself, as it does away with all confidence in the buyer. Let a man commence sheep-farming on ever so small a scale, get up his wool in an honest and proper manner, and he will soon establish a reputation for his brand.

One great defect which I have noticed as largely on the increase, is kempy wool. This is most prevalent in cross-bred sheep. Kemps are short, white hairs similar to those on the legs of the sheep. These exercise a very deleterious effect on the wool, not only occasioning a large amount of waste to the manufacturer but they will not receive the dye. Kemp wool is, generally the result of careless breeding. Two or three kempy fleeces packed in a bale of otherwise good wool, destroys the character of the lot in the eyes of the purchaser. Light, weak and unsound wool, in addition to the causes I have mentioned, is too frequently the result of fluke or worms; it is impossible for sheep badly infected with one or the other, to have thoroughly sound wool. At shearing time every unsound fleece should be put into a separate bin, and each bale of such should be distinguished by a separate mark.

I strongly approve of dipping sheep immediately after shearing, either in a solution of tobacco, potash and sulphur, cr a weak solution of arsenic of the strength of three-fourths ounce to the gallon of water. This cleanses the skin, and effectually eradicates ticks and sheeplice. The effect of occasional dipping in encouraging a rapid growth of wool is extraordinary. In 1864 I cleaned 25,000 sheep of scale in the Lower Bogan district, New South Wales. In April, just preparatory to dipping, I sheared sheep and dipped them at regular intervals in tobacco, sulphur and potash. The growth of wool was so radid that when I sheared again in the November following, I got a very tolerable fleece of perfectly sound wool, and had clean certificates from the sheep inspector of every

Another thing the farmer should pay great attention to is foot-rot. I never found any cure like the arsenic trough. Get all your sheep in, pare the hoofs of the lame ones, taking care to cut away only the diseased portions, and avoid, if possible, drawing the blood; then run the whole lot through the trough, sound ones in | and all, and strain the conglon sente about once every three months, lame sheep will be the exception, not the rule, as is too frequently the case on many stations at the present time. Fine, dry weather is essentially necessary to the operation, and the sheep should be allowed to stand for a short time in the solution.

Classing and culling can never be done better than just before shearing. Every objectionable ewe, whether on account of inferior wool, small size, or other defects, should be removed from the breeding flocks and fattened for the butcher. A really superior breed of sheep can only be obtained by great care and judgment, and the sheep owners who do not possess these qualifications themselves would do well to emtent judge to do it for them. It is all impor- New York City, formerly of this state. tant that the ewes selected for breeding purposes should be as sound and free from fluke chines. By having it made so, a larger basket and worms as possible. Soil and climate have may be used and a larger receptacle at the bar great influence on the character of the wool and tom is had for the honey. This is convenient size and weight of the carcass. All land that for personr having a few stands, as well as for produces good wheat crops also grows good the bee-keeper who counts his hives by the wool. The reason of this is that the soil contains a greater abundance of lime, potash, and frame in use, but also the smallest, and by a phosphates, which are necessary to the development of bone, flesh and wool. The richer the comb can be freed from honey. The revolving soil the sounder, denser and heavier will be the basket that receives the combs, rests on a conewool, and the greater the amount of yolk in it. shaped metal stand, that rises from the center All improvement in the various breeds of do- of the bottom high enough to hold over fifteen mestic animals has had its origin in an ample gallons of honey before it reaches the pivot. supply of nutritious food; this, coupled with judicious selection, is the secret of improved breeding. In the case of sheep, for instance, there will be more wool, more mutton, and a larger percentage of increase from one hundred ey. The overmotion gearing is of the best and

well fed and cared for than double the number strongest construction, and gives great ease in barrel seems to be just as full now as it was beof starvlings. Such being the case, an abundbecause it will not pay. Before closing this paper I will offer a few remarks about shearing, as that season will soon be approaching, and in doing so I wish to draw the attention of sheepowner to a very objectionable habit some shear-This is done by carrying the points of the skears too high and dividing the staple. Such men I consider slums, not shearers. They give themselves more work, as they have to smooth off the blow, thereby giving two cuts where one would do, and the injury done to the staple results in a very considerable loss to the owner Next to abusing sheep, I would sack a shearer who possessed this slovenly habit sooner than for anything else.

Another fault some shearers are prone to is eaving the legs and points of the sheep untrimmed. It is true the wool of these parts is no tof so much value, still it all goes in with the sweepings. I have heard some shearers remark, when spoken to on this subject that if they went too close the mosquitoes would bite to be returned to the bees to be refilled. them. These men I would commend to the society for the prevention of cruelty to animals as worthy of their warmest appreciation. They never had mine.

Cotted Wool and Its Causes.

If sheep are poorly fed, too much exposed, allowed to lie on damp beds, or otherwise maltreated, so that the general health suffers, the skin participates in the imperfect nourishment of the bodily organs, and the wool being less abundantly supplied with the liquids produced by the cutaneous pupilæ from which it grows, and receiving less of the oily secretion (yolk) from the sebaceous glands, withers, hardens, loses its normal elasticity, and is liable to become matted into dense and inextricable masses while still on the back of the sheep. If there is scab or any skin eruption which impairs the nutural nourishment of the wool, the condition is likely to be aggravated, and the matting is even more dense and solid, because the wool is imprisoned by the hardening of the diseased exudation around the filaments. By care to keep the health good, and to keep the sheep thriving, the wool will retain such an unctuou covering and such life and elasticity that cotting will be virtually impossible. The avoid ance of cotting, therefore, implies the avoid-ance of all causes of ill-health, or poverty, whether found in poor shelter, confinement, bad air, poor or innutritious food, lack of water. worms in lungs, bowels or elsewhere, scrofula and other constitutional ailments, or scab or other diseases of the skin. When the wool is already cotted it will usually be found impossiimprove the condition of the system and skin as to insure that the future growth of this and succeeding seasons shall be natural and strong. This course has the double advantage that it not only secures better wool but a heavier clip, and gives at the same time stamina and vigor to the flock .- N. Y. Tribune.

Apiary.

The Honey Extractor.

To old bee-keepers we expect this will be "a twice told tale." Still, perhaps, many readers of the Rural are not aware that there is a machine that will take the honey from the comb common way a few years ago was to brimstone the bees, and take the comb, honey, bee-bread than last year's growth for this purpose, being cluded. The arsenic hardens the hoof, and not antique method gave a mixture that was very only effectually destroys the germ of the dis- unpalatable, as it contained not only honey, but ease, but acts as an antiseptic. The strength of was really a compound of pollen, bee-stings, the bath should be three ounces of arsenic to juice of young bees, wax, and besides all this it the gallon, with about one ounce of salt. The was highly colored and scented by old dirty depth of solution in the trough should not ex- comb. It is easy to judge how unhealthful the crop; but by pruning it very thoroughly, as ceed three or four inches, just deep enough to honey obtained in this manner must be. We cover the hoof. If sheep are run through ar- are induced to write on this subject for the benefit of those who are unacquainted with the extractor, and also to show what an excellent arti- gathered, and counted sixty beautiful quinces cle of food pure extracted honey is.

The honey extractor, was invented some years ago by Herr Von Hruschka, a German resident of Venice, Italy. The first machines were rudely constructed, but Yankee ingenuity has been improving on them for several years past. As each new feature was added it was received with equal favor on both sides of the Atlantic, and to-day American extractors are nearly as common in Great Britain as they are in our own country. We have chosen the latest improved extractor to illustrate this subject with. It is the production of the editor of ploy a professional wool-serter or other compe- the Bee; Keeper's Magazine, Mr. A. J. King, of

The can is larger than that of similar ma hundred. It will not only take the largest simple device the cappings and all pieces of The pivot is out of the honey, thereby preventing it from becoming discolored. The basket is light but strongly made, and will stand the severest strain required in extracting thick hon-

ance of natural food will always be found where turns of the crank are required to throw out the best of cattle and sheep are bred. There the most obstinate honey. The bottom slants must be no starving, no overstocking, simply from all sides to the center and a channel conducts it to a faucet. When the honey is allowed stuff be made into dry sugar? to remain in the bottom for any length of time all speeks of comb, etc., will come to the top, leaving it clear, and in this state it may be drawn off, saving the troublesome process of ers have of making what is called a double cut, straining. Lids that fit tightly prevent dust and insects from entering the can when not in use. This new extractor is highly commended by all that have used it during the past season. It received the first premium at the late Michigan State Fair.

To those unfamiliar with the operation of extracting, we will describe it as briefly as possible for them. The comb is taken from the hive; the bees are shaken or brushed off, earially made for the purpose; two frames are

Thus it is seen that the comb is saved and the bees waste no time or honey in making new comb. It is generally conceded that twenty pounds of honey are required to produce one pound of wax, thus it is plain that by the use half do what you undertake. of the extractor twenty pounds of honey is saved for every pound of wax that would otherwise have to be made, not saying anything about the time that would have to be consumed in making it. Again, honey obtained in this way is perfectly pure and is not tainted with any foreign substance, consequently it is more healthful than strained or even comb honeywax is said, on good authority, to be indigestible. The many uses to which it can be put, and the many good results it will accomplish in the apiary, are too numerous to be named in a single article. Its use is becoming world-wide, and no where are they more required than in this state.

A good honey extractor should be owned by all possessors of bees, from a half dozen of hive up. It will pay for itself in a single season.— U. K. L., in Rural Press, San Francisco, Cal.

Morticulture.

Pomological Questions.

The Michigan Pomological Society has named for discussion, among other subjects at its meeting to be held at Hillsdale, on the 11th, 12th, and 13th of this month, the following:

1. Insect enemies of the fruit grower, and how to destroy them. 2. How can a supply of grapes for a farmer's home be eheaply grown? ble to restore it; and the object should be so to 3. Kinds of apples that will yield most profit and why? 4. Flowers about the country home -What to plant and how to care for them? 5. Evergreens for the farm-What to get, where to put them, and how to care for them? ganization of horticultural societies a method of strengthening our own organization. 7. How new varieties are originated. 8. Best method of storing winter apples. 9. Fertilizers-What best for the orchard and what for the farm? 10. How best to enhance the value of a farm to sell or to keep?

Pruning Quince Trees.

Let all who will succeed remember to prune vigorously every year before the buds swell in the spring, and use the largest of the prunings without injury to either comb or honey. The to propagate more trees. The wood that is two or three years old, will be found even better about a foot in the ground, and you can hardly fail of growing a tree to every cutting.

One of my neighbors with a tree about the size of mine, complained of the smallness of I directed, had as fine a crop this last year as I ever saw grow; the largest weighing fifteen ounces. I saw the tree after a part had been yet on the tree. They would have measured at least half a bushel. The prunings had been planted as cuttings and produced some good trees .- Maryland Farmer.

Miscellaneous.

Sorghum Sugar.

MR. J. A. HEDGES: Can you tell me who keeps for sale suitable thermometers to test the density of boiling molasses? Can it be sent by mail and what will be the cost delivered in Burlington, Kansas? I want to get one for next season's crop. I have a saccharometer.

I have got an open-ended barrel about threefourths full of sugar grained from top to bottom. Last fall it was about one-half full of old molasses, very grainy; the balance, one-fourth, I filled in with new molasses, and left it out of doors covered up. About the first of January I examined it and found it sugar, so dry and firm that a dog might easily have walked over it without sinking in or getting his feet dauby. I set the barrel up on blocks and bored two holes near the bottom with a quarter-inch bit. I then took a stick and punched a hole down through the sugar from near the center on top to the side next the holes at the bottom. It drips out (sugar and molasses mixed, very slowly, perhaps a gallon in a week. In what runs out, the sugar settles to the bottom. The sugar in the barrel does not sink any, and the

running and facilitates operating. But a few fore any ran out, yet at the same time the sugar seems to be too tough and sticky, and when scratched around it rolls up. Exposure to the air and stirring it dissolves it slowly. Can such AMOS ROSER.

Burlington, Kansas.

MR. AMOS ROSER: Your valued favor of the 6th inst. is before me, and its contents duly noted. In reply I will say I have made a sugar thermometer adapted to country uses; price, \$2. It cannot be sent by mail, as regulations prohibit anything of glass. Price, by express, 50 cents, or rather the express charges are 50 cents. That sugar of yours is quite significant, as showing that your soil and climate is well adapted to the production of sugar, otherwise it FARMER are now welcome. would not granulate under such unfavorable ried to extractor, uncapped with a knife espec- circumstance, but this is only another evidence among the many coming to us from all parts of placed in at a time; a few turns of the crank our great country. Would a prospector after a throws the honey out of the comb by centrifu- gold mine be doubtful of ultimate success in gal force without injuring it; the frames are finding a rich mine were he to find such cropthen reversed so that the other side may receive ings as we are finding in our search for sugar. a similar "whirl." The combs are now ready I am pleased to say that your state is not excelled in these outlooks. Let your cultivators seek well to learn how to produce the best quality of cane, and then prepare good works for the manufacturer seeking the best methods to do it, always avoiding efforts to do too much and not I mourn that your state has lost an sble

worker just as I had commenced to cooperate with him in this great industry; I refer to the Hon. Alfred Gray, late secretary of the state board of agriculture. But I trust the board will select a competent successor who, with the asssitance of the accomplished chief clerk, will continue in the good work so well begun. great need is skill, in this business, and I know of no other means so legitimate as our agricultural colleges for disseminating knowledge. I have pressed it upon our state until they have taken the iniatory steps to the accomplishment of this object. The persevering character of our late friend Gray gave me much confidence in the forward movement of our western neigh boring state. I trust the press of the state will take hold of this subject as it deserves, and awaken the powers of the state to its true interest. The investment of a few thousand dollars upon the college farm in the erection of works of capacity to work up a crop of forty or fifty acres, partly of their own culture and the balance from neighboring farms, would educate, annually, forty or fifty young men in the business of cane-growing and sugar-making. Each of these students would return to their home qualified to take charge of works that would run off a crop of hundreds of acres. I fear if some such well directed effort is not made, the eagerness, so characteristic of our people, to pitch headlong into such enterprises, will result not only in loss to individuals, but seriously endanger the estimate of this industry. I have lived to witness several ups and downs of agricultural anticipations; I have, however, found in this, from the first, a base of reality that gave me confidence even when it has been decided as another "Morous Multicaulius humbug," and no one rejoices more than myself to see ultimate triumph so near. But we must not falter yet, lest some mistakes shall change the current. J. A. HEDGES.

How to Raise and Handle Flax Seed.

Mr. Stoner, Mr. Alexander, and others having given valuable suggestions in the FARMER concerning cheap shelter, roof, etc., besides innumerable valuable suggestions from other sources. I will cast in my little mite in acknowledgement of such favors from others.

which I think it worthy; first, because if proping out very strong roots. Cut so as to set erly managed, it will be a source of small profit; and, second, it so diversifies the crop that there is less danger of a disastrous failure.

Plant on fresh plowed ground, (the deeper plowed the better). Follow the plow before the clods get too dry to be easily crushed, with a drag made of plank or timber as has been previously described in the FARMER, (no farm outfit is complete without one). This leaves the surface finely pulverized and smooth so that the seed will be planted an equal depth, giving it an equal start, which is very important. Sow broadcast and cover with a light harrow. Harvest as soon as the bolls begin to open. Follow the reaper and lay the fifth course of bunches to one side, so as to make room for a team to pass through. Clean off a floor 30 to 50 feet in diameter, an old stock yard is best because more compact, and will not so readily mix with the seed. Take a large hay frame, and if you have a low wagon, so much the better. I have one made by sawing off the end of a sound well seasoned elm log, five inches long for wheels on temporary axles and 2x10 joist so framed that they constitute coupling and foundation for hay frame, which makes a most convenient farm wagon for many purposes. Next you want a common farm roller, which no farmer ought to be without, and if you have a fan your outfit is complete for putting your seed in good shape for market. A boy drives the team through the open space, a man on each side puts two courses of bunches on the wagon. No loader is needed. Spread the flax six to eight inches deep over the floor. Put your team to the roller, the tongue of which should be set a little obliquely so the reller will describe the same circle as the team. Pass over the flax a few times and the bolls, if as dry as they should be to be safely stacked, will be found broken, the seeds out, when the lint is ready to be removed with forks.

If you have a large crop, you can, by using the help required to operate a threshing machine, get seed ready for market in this way fater, and in better shape, than by using a machine, and waste less seed.

In cleaning up the floor, scrape all the seed you can get without disturbing the earth-clean that up, then sweep the floor clean, and if you get some sand that cannot be cleaned out, it will do no harm for your next year's seed.

If the flax raiser follows the above simple directions, he will be saved the expense of stacking, the threshers' bill, some help hire, and have more seed, and I think, will find it average well with other crops as to paying, besides, it comes between other crops.

I received my first instructions in flax culture from the KANSAS FARMER years ago, and years of experience have suggested some of the foregoing methods to which the readers of the

Plum Grove, Barton Co., Kas.

Our correspondent has placed us and our many readers, especially those who are growing flax or propose making it one of their crops, under many obligations by furnishing his economical and eminently sensible mode of managing flax as a seed crop. "Experimenter" is doubtless in possession of many more good things which would greatly benefit his brother farmers to know. By relating such valuable experiences, the whole farmer family will imperceptibly grow into one vast co-operative union which will be more powerful than the famed lever of Archimedes.

New Process of Making Cheese and Butter. .

The air is full of novelties. One would have thought that the centrifugal milk separator was enough to satisfy the most ardent admirer of ingenious contrivances in aid of the hardworked dairy-maid; but now a voice is heard, this time from Germany, which promises to spare, for the future, all labor in the manufacture of butter and cheose; these articles being engaged to submit themselves to the wand of a new magician, whose delicate touch will henceforth compel them to extract themselves from their liquid matrix, while their old-time tormentor is, I dare not say asleep, for we all knew that the "fermiere" never sleeps, but attending to other matters no less important to the well-being of her family.

We all know that, if a quantity of cream wrapped in several folds of cloth be buried in the ground, at the end of 20 or 30 hours the water will be found to have left the cream, and the solid particles remaining, well washed to expel the casein will give a remarkably pure, wellflavored butter. The weight of earth resting on the enveloped cream is the active agent in this change; a change gentle, and slow, like all the operations of the great Mother.

Again, if milk is coagulated by the use of rennet, or by allowing it to turn itself by the formation of lactic acid: a mass is found gathered together in the surrounding whey, which mass, being dried by pressure, is cheese. These facts have been laid hold of by a German lady who, following out her investigations on the true principles of induction, has contrived a machine by which butter and cheese may be almost said to make themselves. In butter making, the cream is put into clean linen bags, surrounded by two or three folds of coarse canvas. No pressure is employed for the first 12 hours; then weights are gradually applied in increased proportions until, at the end of the second day, the sack is opened, and the pure butter is found freed from all the buttermilk. The manufacture of cheese can be conducted on the same plan but the ultimate pressure must be greater. The most perfect clean-Flax raising is attracting some attention, of liness must be observed in this as in every other

process connected with the dairy.

The inventrix of this method, after having submitted the products of her ingenuity to the inspection of Messrs. Luss, Braudt and Nawrocki, of Berlin, believes that she has a right to state that the gain in butter is 10 per cent., and 20 to 25 per cent. in cheese.—Illustrated Journal of Agriculture.

Epizootic.

I have a valuable mare that is afflicted with some disease, and I would like some of your numerous readers to tell what ails her. Her symptoms are: turning up of the upper lip, which soon causes a mattery discharge of the nostrils; also has a cough; appetite variable.

Will some of your readers please answer, and oblige,

H. K.

oblige, Wabaunsce County, Kansas.

This malady is quite prevalent among horses, we learn, and is not restricted to any particular locality. The disease, we are informed by horsemen, differs from the epidemic which prehorsemen, differs from the epidemic which pre-vailed among horses all over the country a few years ago, and was known by the above name, but is evidently a type of that disease. The malady is not considered dangerous, if the ani-

mal has proper care.

Treatment.—Keep the horse in comfortable quarters, secure from exposure to cold drafts and wet. Feed on bran mashes and other light, relaxing and cooling food. Administer a tea-spoonfull of common table mustard three times a day, by drawing out the horse's tongue and placing the mustard as far back on the tongue as possible. Give salt with the feed, in moderate quantities.

Osage Grange Hedges.

ED. FARMER: Being a farmer, and inexperi-ED. FARMER: Being a farmer, and inexperienced in the growth and culture of osage hedges, I would like, if permitted, to ask, through your valuable columns, of experienced farmers, a few questions, as follows: 1st, About what time should hedge seed be sown? 2d, How deep should the seed be covered? 3d, How-should it be replanted, and when? 4th, If the ground be new, would manure aid it? 5th, Could a fence be successfully grown from the seed? By answering these few questions you will confer a great favor and oblige a subscriber of your most valuable and ever welcome paper.

John Shellenberger.

American Desert.

Several weeks ago I wrote an article to the FARMER making inquiries in regard to the feasibility of raising our own sugar from sorghum cane, hoping that I might draw out some ideas from those who have had experience in the raising of sorghum, but have seen no response from any one as yet. I am glad to be able to state, however, that the subject has been agitated in Pawnee county, and the farmers have fully determined that they will no longer pay the exorbitant prices demanded for sugar, but will make not only their own, but supply other markets. With this object in view the farmers of Pawnee county met January 31st, in convention at Morris' hall, Larned, and took preliminary steps to organize a sorghum sugar manufactory and refinery. A committee of three, consisting of Judge Cornell, of Kinsley; Maj. Inman, of the Larned Chronoscope, and Col. S. S. Dickinson, of Larned, to procure a charter and draft by-laws, and report at the next meeting to be held February 7th, for permanent or ganization. The company propose to build a mill and refinery at Larned; to cost about fifteen thousand dollars, and branch mills to be located at different points in the county, for the purpose of making syrup, to be sent to the refinery to be converted into sugar, thereby saving the expense of hadling the cane to Larned The company propose to put the shares at ter dollars, and each shareholder pledges hinself to raise one acre of sorghum, which the company agree to purchase at a price to be agreed upon in proportion to the average amount of sugar it makes. The people here are very sanguine of success, taking courage from the success of the Silver Lake refinery in Illinois and Ray, Pawnee Co., Kan. ETHAN, ALLEN.

.. Congratulations, Etc.

The new year has come and we are thankful. or at least should be, that we are so highly favored with such pleasant winter weather .. I must compliment the FARMER on its centents, variety, modest moral tone, and good advice on farming, as well as general news from our brother farmers. I am very much pleased with perusing the letters from others of more experience in different branches of husbandry. I am highly pleased with Mr. Samuel Stoner's feed rack and manger, . I think it is just the very thing for every one that teeds stock and wisher to have them feed regularly and economically; and also the shed part for hogs or calves is very nice-it is a complete outfit for profit and comfort; too much cannot be said in favor of it, and hearty thanks are due. Mr. Stoner, the inventor, will please accept a kind and cordial a welcome from me a stranger. I am very much pleased to read so many interresting letters from different parts of the state. They are a marked improvement to the FARMER as a source of valuable instruction to its readers and guides in many ways.

Stock in this section is doing very well. A good many cattle and hogs have been fed and sent off to market, with a good many more still on hand. No disease among cattle in this section. Diseases among stock generally originates from a neglect of attention to them.

I hope many more will add to the FARMER'S letter columns, and make it still more interest-H. R. BALDWIN.

Batrons of Husbandry.

NATIONAL GRANDE.—Mustar: J. J. Woodman, of Michigau; Secretary: Wm. M. Iroland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y. EXECUTIVE COMMITTER.—Henley James, of Indiana; D. Wyatt Aiken, of South Carolina; W. C. Wayne, of New York.

KANSAS STATE GRANDE.—Master: Wm. Sims. Toron. / York. ANSAS STATE GRANGE.—Master: Wm. Sims, Tope-Shawnes county: Secretary: P. B. Maxson, Em-

a, Shawnee county; Secretary: P. B. Maxson, Em-oria, Lyon county; Treasurer: W. P. Popence, Topeporia, Lyon county; Treasurer. W. H. Jones, Holton, Jackson county; Levi Dumbauld, Hartford, Lyon county; J. S. Payne, Cadmus, Linn county.

son county; Levi Dumbauld, Hartford, Lyon county; J. S. Payne, Cadmus, Linn county.

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TO OFFICERS OF SUBORDINATE GRANGES. For the use of Subordinate Granges we have a set of receipt and order books which will prevent accounts getting mixed up or confused. They are: ist, Receipts or Dues. 2nd, Secretary's Receipts, and 3d. Orders on Treasurer. The set will be sent to any address, postge paid for \$1.00.

We solicit from Patrons, communications regarding the Order. Notices of New Elections, Feasts, Instal-lations and a description of all subjects of general or special interest to Fatrons.

A Conundrum for the Politicians.

break up the democratic party' if the farmers of Missouri should elect a highly respectable and thoroughly endorsed democrat to the determining the rights of personal property. ly increased strength, both in point of numbers office of governor? That is a question we The aggregate annual cost of sur state judicia- and in character.

Sugar Manufacturing in the Great would like to have the anti-farmer court house ring organs to answer. Let the answer be yea

or nay, without any beating about the bush."

Let us transpose this hard question and ask Will it "break up the republican party" if the farmers of Kansas should clect such an "endorsed republican" to the same office in this state? What answer have the farmers to give?

The Power of Organization.

A portion of the farmers of the country recognizing the fact that like other classes they should be organized, have associated themselves together in the grange, and many seem to feel that their work is accomplished as soon as they are inside of the gates, and that as soon as a grange has acquired members, the end is se cured. But it is just at this point that the work which called them together, begins-the work of elevating and educating the farming commu nity. These farmers' meetings are called organizations, but where are the works that prove them such?

Organization means bringing together all the parts so they may be used as a whole. If the leading minds of a grange can control and direct the combined efforts and energies of its members to the accomplishment of any, figancial or educational purpose, progress and the fruits of organization may certainly be expected. There is a large moral and intellectual force in every grange that should be disciplined and made use of for the advancement and elevation of its members. Let a grange determine what its needs are and then bring its whole power to bear on these points, one after another, until the desired end is compassed.

If the Patrons' Mutual Aid Society is thought to be a worthy feature, let it be investigated and discussed, and if found fully deserving of encouragement and support, every officer and every leading member of the grange should charged; mills have stepped; forge fires gone feel themselves called upon to see that every faculty of the grange is brought out and made to be of service in procuring the success of this institution, and when this is accomplished it will be found that the success already achieved strengthons them for other work.

When a grange engaged in the prosecution of educational purposes, finds itself in need of smelting works, the marketing of lumber, the a library, they will find they are amply able to have one if the grange is so organized that it speculation, have kept steadily enward in your wills it. The first practical effort in any such undertaking is the important step that gives hope and makes way for those who are undecided and doubting. If no beginning be made no end will be reached, and no success will ever be attained. How many are creeping along through the world who might have prospered themselves and been useful to others if they had acted well their part instead of putting off, from day to day, their resolutions of industry and reform. The hope of every grange is the intelligence, unity and perseverance of its members; it cannot afford to take ignorant, selfish and indifferent members unless there is good reason for believing they can be educated to better things.

When a grange has made sufficient progress it will see that enthusiasm is its first and greatest need, and that this cannot be kept at a good working pitch unless the members are thoughtful of its interests, and they will not and cannot be thoughtful of the grange unless they read of it. When this fact is fully realized they will restless, uneasy fears, gird ourselves anew for make use of the power of their organization to devise means and make sure, in some way, that every member has a good agricultural paper. In no other way can members be educated so cheaply; and in no other way can the enthusiasm upon which the life of the grange depends, be so surely maintained .- Dirigo Rural.

Vi ho Pays the Taxes?

The committee on assessment and taxation, ed by the New York state the following answer to the above question.

Your committee on assessment and taxation beg leave to report to this honorable body, that in the brief time allotted them for their duties, they have been mable to give the subject that thorough investigation that its importance demands. Your committee are fully convinced that there is no subject of greater importance to the citizens of the state of New York. All who have given this subject any thought or investigation, are fully satisfied that our present laws for the assessment of taxes are radically wrong and unjust, and that they impose excessive and unjust burdens upon the owners of real estate, and more especially upon the producing classes. From reliable statistical information, your committee have ascertained the fact that the real and personal property of the state of New York are about equal. From the assess-ment of 1876, it appears that the personal property of the state was assessed at \$374;488,140, while the assessment upon real estate amounted to the enormous sum of \$2,367,553,273, or about seven times the amount of personal property. Hence we see from these statistics that notwithstanding the fact that personal property and real estate are about equal, yet real estate is compelled to pay seven-eighths of all taxes. Your committee desire to call the attention of this body to the injustice of this system of taxation, by referring to farther statistical information, taken from the address of Prof. E. W. Stewart, before the State Farmers' Alliance in regard to the comparative cost of legal protection of personal property and real estate. He says: "Is there anything in the nature of per sonal property that renders the protection of government less important to it. What pro- and valuable features of the state grange pro-The Journal of Agriculture asks: "Will it portional time are our courts occupied in settling the rights of personal and real estate? At reports of condition, etc., by the delegates least, three-fourths of their time is occupied in The general scope of the reports showed large

ry is not less than \$800,000, of which \$600,000 should equitably fall as a charge upon personal property, but of which it pays less than \$100,ooo." Also in times of riot and mob violence, personal property is much more liable to damage and destruction than real estate, and we have laws upon our statute books authorizing the levying of a tax upon the city, town or county, equal to the value of all property destroyed. But who pays this tax? Does personal property equitably assist in protecting itself? On the contrary eighty-five per cent: of all 'such losses must be paid by real estate. The farmer cannot hide his farm, nor swear it out of existence. It is what the law designates as tangible property, and he is compelled to pay a tax upon it. while capital manages to escape taxation almost entirely. Nor is this the worst feature of the case. Not only do the laboring and producing classes pay taxes upon all they are worth, but very often they are obliged under our present laws, to pay taxes upon property which they only nominally own it being mortgaged for onehalf or two-thirds its real value. And the holder of the mortgage is also taxed upon the mortgage when it can be reached, Thus the property is made to pay a double tax, and in such instances as this, the burden falls with crushing force upon those least able to bear it. Your committee fail to see why a farmer should

Stability of Farming.

ducting the indebtedness.

pay taxes upon property that he does not own,

or owes for, when all other property except real

estate, pay taxes on only what is 'left after de-

Extract from the address of D. H. Thing, delivered before the Fair of Cascade Grange, Maine:]

"But hard times have come; merchants have failed; elerks by the thousand have been disout; granite contracts are few and small; loafers fail to live by their profession and have taken the road as tramps. What kind of a picture is this, patrons 2 . Is it not a true one? Is it overdrawn? How is it with you, who allthrough the inflation of prices, the rush of manufacturing, the building of railroads, the roar of chosen work. I appeal to the intelligent audience before me, if taking all things into ac count, there is to-day any other considerable class in our state so well off as the prudent, in. dustrious farmer, and my wish now is to say some word that will make some of you see and feel this more clearly than before, and thus cause you to be better satisfied with your lot and by thus doing, add in some small degree to the aggregate of human happiness. Not that we are to be happy that others are in less favorable circumstances than ourselves, but let these young farmers give just and honest credit for all the blessings they enjoy.

We can afford to "let our tub stand up on its own bottom," to rest our case upon its own merits; and besides we have the satisfaction of knowing that while we build ourselves up, we pull no other class down. Then, brother farmers, let us cease our envious feelings, if we have often mere imaginary wocs or wants, quiet our approved strains. our work and resolve again to go on the way that Providence has so clearly pointed out as the path of duty."

Stick Together.

The greatest need of the Patrons of Husbandry at this opportune time is to stick together. Stick together as an organization; stick together for the advancement of our cherished principles; stick together for the right, though every monopolist and extortioner in the land goes down. We are now stronger than ever to mould sentiment in our favor, and to have the right to prevail, no matter who on PEACHES. earth opposes us or attempts to oppress us. But to boldly advance and enjoy these cherished privileges we must stick together. The Great Master will assuredly help us if we will only help ourselves; for-it cannot be gainsayedwe stand on primitive principles-those laid down in the revealed Word. The world will also help us, if we will but help ourselves, for public sentiment is invariably moulded by energetic combination, and everything of moment that ever transpired was successfully carried through on this fundamental principle. Stick together .- Farmers' Friend.

Farmers to the Front.

New Salem Grange, No. 1877, Barry county, Mo., demands the nomination and election of farmers instead of so many lawyers. The following preamble and resolutions lately passed by that grange speak for themselves, and are to the point:

WHEREAS, It has been the universal custom of all the leading political parties in our state and national governments to nominate and elect men of the profession of law; and WHEREAS, The legislation has been and is

WHEREAS, The legislation has been and is of the nature and tendency to make the rich richer, and the poor poorer; therefore be it Resolved, That we as free citizens will not not consider ourselves under obligation to vote for the nominee of any political party, except he be identified with the industrial pursuits of the country.

the country. The Husbandman says of the meeting of the New York state grange: Among the interesting

Advertisements.

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From pure Light and Dark Brahmas. Write to F. E. MARSH, Manhattan, Kas

For Sale.

A FOUR-HORSE RAILWAY TREAD-POWER of the Dederick make. Call on J. M. TIPTON, 111 Sixth av., Topeka.

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Can rely upon immunity from contagious disease in their flocks after use of LADD'S -TGBACCO SHEEP WASH. GUARANTEED an immediate cure fer scab and prevention of infection by that terror to flock masters. GUARANTEED to more than repay the cost of application by increased growth of wool. GUARANTEED to improve the texture of the fleece instead of injury to it as is the result of the use of other compounds. GUARANTEED to be stroy vermin on the animal and prevent a return, GUARANTEED to be the most effective, cheap and safe romedy ever offered to American. Wool-growers. No flock master should be without it. I have the most undoubted testimonials corroborative of above. Send for circular and address orders to W. M. LADD, 21 N. Main St., St. Louis, Me.



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The largest importers and breeders of Holstein Cattle in America. Also large importers and breeders of Clydesdale horses, and breeders cherished them; stop repining at our real, or of Hambletonian horses of the most

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Most Liberal Terms

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E. D. STOCKING, BROKER,

176, Broadway, New York City. Specialty, exchange of Kansas farm and wild lands for 1

JEWELRY,

SILVER-PLATED WARE WATCHES, AND CUTLERY.

For price lists and terms, address as above. I will attend to purchase of all kinds of merchants and shipping same to merchants. E. D. STOCKING.

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BLUE VALLEY HERD.—Walter M. Morgan, Here-ford Cattle and Cotswold Sheep, Irving, Marshall ount y, Kansas. Choice Young Bulls For Sale.

G. B. BOTHWELL, Breckenridge, Mo., breeder of Spanish or Improve dAmerican Merino sheep of Hammond stock, noted for hardiness and heavy fleece. 200 rams for sale.

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POR SALE. Scotch and black & tan ratter pups, \$10 each; shepherd pups, \$15 to \$25; also pointers and setters. These are lowest prices. All imported stock. A. C. WADDELL, Topeka.

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MIAMI COUNTY NURSERIES. 11th year, large stock, good assortments; stock first class. Osage hedge plants and Apple trees at lowest rates by car load. Wholesale and retail price lists sent free on applicatioe. E. F. CADWALLADER, Louisburg, Ks.

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TEETH extracted without pain, by Nitrous Oxide gas, or laughing gas, at R. STULTS Dental dooms, over Funk's Clothing Store, Topeka, Kansas.

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I have a few choice Plymouth Rock and Brown Leghorn fowls for sale at reasonable figures if applied for soon. Address Mound City Poultry Yards, Mound City, Kansas.

To Bee-Keepers.

Many of our subscribers are lovers of Honey and would keep bees enough to supply their own tables at least if they know how. We have made arrangements (ofurnishiall such persons the 32 page monthly Bee-Keeper's Magazine at only \$1 a year (formerly \$81.50) or the Kansas Farners and Magazine for \$2.00. Also all bee books and articles used in Bee-Keeping at very low prices. The Magazine gives beginners just such information as the must have to make the business successful and profitable. Send the money direct to us and we will see that your orders are promptly filled. For Prices of Extractis, Hives, Smokers, Uncapping knives, etc. Address, Publisher of the Kansas Farner, Topeka, Kansas.

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In Shawnee and adjoining Counties on good Farm security

At 8 and 9 per cent.,

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Beautiful Indian Territ

When we went to Texas, we picked out the route down through the finest portion of Missouri, by way of the "Queen City" Sedalia, thence to Fort Scot and Parsons, through the garden portion of Kancat and Parsons, through the wonderful "Valley of the Neosho," with its rolling upland prairies, broad majestic rivers, springs of pure water, deep ravines, rich plains of waving corn, dotted here and there with pretty farm cottages nestled under the green slopes.

Going south from Parsons, Kansas, our route led down towards the blue waters of the Gulf of Mexico, and we entered the Charming Indian Territory, just below Chetopa, Kansas.

Beautiful Indian Territory, inexaustible in its variety of resources, with its mines, forests and prairies; its mountains, cataracts and canyons; its valleys, dales and streams; the brightest skies, the grandest sunsets, the softest willight and the most brilliant moon and glittering stars; her fair surface covered with the rareal fragrant flowers; home of the wild horse, deer, elk, bear, turkey, grouse and birds of song. Broad winding streams, clear as the fabled mirror in the halls of the fairies, wind along the green prairies, stretching in airy undulations far away as if the ocean in its genitest swell stoed still with all his rounded billows, fixed and motionless for ever. No other country on the globe equals these wonderful lands of the red man. With a llugering look at them we crossed the Red river and entered Denison, the "Gate to Texas." From this point our route led thre' the linest and riches portion of Texas through the grain and cotton growing districts, and the wonderful marks of progress we saw! Our earnest advice to those going to Prexas is to be sure and take the route though the grain and cotton growing districts, and the wonderful marks of progress we saw! Our earnest advice to those going to the seat of the same and texas

THE KANSAS FARMER.

E. E. EWING, Editor & Proprietor,

TERMS: CASH IN ADVANCE. One Copy, Weekly, for one year, One Copy, Weekly, for six months, One Copy, Weekly, for three months

The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whisky bitters, and quack doctors are not received. We accept advertisements only for each, cannot give space and take pay in trade of any kind. This is business, and it is a just and equitable rule adhered to in the publication of THE FARMER.

TO SURSCRIBERS

TO SUBSCRIBERS. Subscribers should very carefully notice the label stamped upon the margin of their papers. All those marked 8 or a 8 expire with the next issue. The paper is always discontinued at the expiration of the time paid for, and to avoid missing a number renewals should be made at once.

Dissolution of Copartnership.

The copartnership heretofore existing between J. K. Hudson and . E. E. Ewing, under the name and firm of Hudson & Ewing, was this day dissolved by mutual consent. The KANSAS FARMER will in future be conducted by E. E. Ewing, as editor and proprietor, and the Daily and Weekly Capital and job office will be owned and conducted by J. K. Hudson, who will settle all bills against the late firm. All bills due for advertising in the KANSAS FARMER must be paid to E. E. Ewing, who will receipt for the same.

All letters and communications should be addressed in accordance with the above arrange-J. K. Hudson,

Topeka, Kansas, Jan. 31st, 1880. P. S. The above publications will be continued at the old stand, 209 Kansas Avenue.

Great Inducements to Subscribers.

We offer the KANSAS FARMER to single subcribers Two YMARS FOR TWO DOLLARS payable in advance. We wish to place the FARMER in the hands of every farmer in Kansas and increase its circulation beyond the borders of the state, and to this end we offer the above inducement which is virtually reducing the price to single subscribers to one dollar a year, our only advantage being the advance payment for the second year. Club agents will be allowed to include two year subscribers in making up their clubs of \$10.00. Five two year subscribers paying \$10 will entitle the agent to a copy of the FARMER for one year; or a mixed club of one and two year subscribers, when the money for his club amounts to \$10, the agent will be entitled to a copy free for one year. Now let us branches of the government with them, both see what our agents can do in raising clubs before the spring opens. Six weeks yet remain the laws, and the administration of them, their to work for clubs and a free copy of the KAN-SAS FARMER.

Salt Water Fish on the Prairies.

The results accomplished by the genius of man in modern times has almost ceased to excite a ripple of curiosity, and even if some greater genius than Edison, should succeed in placing man in possession of the amazing vril power of Bulwer's dwellers in the centre of the earth, it would scarce serve as a nine days wonder. We have heard the "old folks" say that a dish of red herring served at a wedding party in the backwoods of Kentucky fifty years ago, was considered a rare treat. But railroads and refrigerators in these modern days, bring fresh cod, haddock, mackerel, lobsters and blue fish from the coast of New England, and salmon from the Columbia river, to the dwellers on the central plains and prairies of Kansas. An enterprising fisherman named McKay has established a booth in Topeka, but he does not display at his stand the catfish and mudsuckers of ver Kaw, but the above named, and many other salt water and lake fish. Among his display of the finny tribe a few days since was a salmon from the Columbia river, weighing 26 pounds, fresh and firm as the hour it was landed flopping from its rative element.

Mr. McKay, the jolly fishmonger of the prairies, laid a pound of the rosy flesh of that "big fish" on the sanctum table of the KAN-SAS FARMER, which after passing through the hands of the domestic head of that bucholic institution, was a luxury that epicures might well envy. And this is the way it was prepared:

Wrap the fish, after it has been washed and wiped, in a clean' linen cloth, baste it up and put it in the fish kettle. Cover with cold water to which has been added a little salt; boil slowly, allowing about a quarter of an hour to each pound of fish. Serve with egg sauce made as follows:

Three hard boiled eggs, one teacupful of drawn butter; chop the yolks only of the eggs very fine, and beat into the hot drawn butter salting to taste. Chop two or three small cucumber pickles fine and added to the sauce: pour over the fish and serve.

Political Thinking.

has been the custom in the past, and as it is at good citizens under the law and constitution. who are prompted solely by sordid motives, When farmers learn to do their own voting— that the world ever saw, or is likely to see in they think they are doing it now, but they are this or any future generation. All that is reqmistaken—then the village doctor, merchant, uisite to their success in such enterprises is education, lawyer, etc., will be found voting to cation in that direction. They possess the powin the smiles and favor of the farmers on litical power, the material wealth and the exec-

clination occasionally to kick over the traces. The non-producing population have so long dictated the policy of government, appropriated the offices, assessed the taxes, administered just- quire teachers who have been taught to teach. ice by the regulation pattern, formed with the design of taxing costs on the parties who seek justice through legal forms, at every step in the slow, circumlocution proceedings, that these classes have finally fallen into the belief that it is a kind of divine right for them to rule and the producers to bear the principal part of the burden of taxation, and that the impress of the agricultural class-should nowhere be found on the government.

Our governments, state and national, are all mercantile governments, manufacturers' governments, bankers' governments, and, above all, lawyers' governments. In vain we look for any distinctive feature which might be termed agricultural. The only apology for this feature in the national government is a small bureau with a commissioner who purchases and distributes a few seeds, not the equal in this respect of many of the large seed stores and farms in the country. In a few of the states there is a bagatelle appropriation for agriculture, at the mercy and whim of a legislature composed of memers whose interests direct their thoughts and feelings into opposing channels.

It is high time there was a reform in this matter. The United States being the greatest agricultural country in the world, that industry hould exercise more than a negative influence in the government, state and national.

Manufacturers have exercised a very mark influence in times past and have profited greatly by it. They had even a policy championed by one of our most distinguished and able statesman, Henry Clay, which was dignified by the proud title of American System which was strong enough in its day to divide the country into opposing political parties. By virtue of that government influence our manufacturing industries are strong enough to compete with all nations in their own markets. A greater interest than all those mentioned, combined, has never received any special fostering through government influence; nay, it has never received even-handed justice. Its claims have been spurned, in a measure, from every legislative hall in the nation, or coldly ignored which virtually amounts to the same thing.

The time has now arrived when farmer should choose their ablest men and fill al state and national. They would soon give to own peculiar impress. Their notions of econ omy and plain, direct administration would soon crop out. Fee bills would be wiped out which now support useless offices. Justice would be simplified, litigation curtailed, and nine-tenths of the expensive legal proceedings now in practice be superseded by courts of arbitration, where justice would be administered speedily, without delay, fairly, and without partiality, with a saving that would reduce our taxes one-half and probably more. Let us have an American system which reflects the leading interest, and the great majority of the population of the country, by making lawgivers of the men who are imbued with the spirit of agriculture, who live by it, and are a part and parcel of that industry which is in direct intercourse with the soil.

Farmers, do not longer allow talking officehunters and professional politicians to amuse you and divert your attention from your own interest, while they reduce your influence to a mere make-weight to serve their own selfish ends. As you are depended upon to pay the arger part of the immense sums of money which are spent in our extravagant systems of government, see to it that you do the assessing, and examine into the whole political machine, which is full of leaks, with an office-hunter holding kis purse at every crack. You will discover lots of holes, which ought to be stopped up, where your money is constantly running out to waste. Before another election is upon you let farmers resolve to send to the state capitals their well-to-do, serviceable, sound-thinking, sturdy men, in sufficient numbers to vote down and silence those expert professional parliamentarians who come with itching palms in the interest of any party who will pay them most, but never in the interest of those whom they in mockery call their constituents.

If a few poor weavers in Rochdale possesse the ability to organize a co-operative, commercial association which controls at present, a capital of more than \$25,000,000, would it be an impossible undertaking for fifty thousand or more intelligent, and in comparison with those poor weavers, wealthy, American farmers to construct and work a freight railroad from the Missouri river or the Rocky Mountains to the Atlantic Ocean. American farmers can accom-When farmers lean to do their own political plish such and a great deal greater enterprises thinking in place of having it done to order, as if they will first learn to unite their strength, their intelligence and their wealth. A freight present the fashion, a new leaf wil be turned in road running at a low rate of speed, 10 miles our politics. The village lawyer will not then an hour, would not be subject to one half the be seen making his rounds among the rural expense of wear of track, locomotives and cars population preceding elections, instructing that the lightning trains and roads bearing them how to vote, and assembling them at the them are. American farmers united for an cross-roads hotel and haranguing them by honest, business purpose, could drive to the torchlight, impressing on them their duty as wall all the railroad kings and corporations, that the world ever saw, or is likely to see in

whose patronage they all depend for their bread utive ability. To develop them to their full caand butter. As matters now go they dictate pacity is all they lack. The millions which who the farmer shall vote for, prescribe the they are spending on public schools will be measures he shall support, and even propose to spent to comparatively small purpose, if the proscribe and punish him if he discovers an in- education these schools impart does not enable their children to become rulers of the land in place of bondsmen to their brethren. The schools sorely lack in one essential.-They re-

> We neglected to state in our last issue, in connection with the very excellent article entitled Apathy of the General Farmer in Regard to Improved Stock," by Mr. F. D. Coburn, that the essay was read by Mr. Coburn before the Breeders' Institute at Manhattan, Kansas, and very kindly furnished the KANSAS FARMER, for publication, by Mr. A. W. Bollins, Secretary of the C. R. B. Association.

The Farmers' Correspondents, Etc.

ED. FARMER: Your welcome paper is again before me, well stocked as usual with good, practical, matter-of-fact articles full of information derived from experience in real life, with material things, by many of your farm correspondents; and therein is where the KANSAS FARMER differs from other farm journals. All others that I have read have derived their wisdom from one sublime source one man in his sanctum has cracked his editorial home around the circus ring marked out by his individual ideas and theories, and every fact that refused to bend to that circle, but struck out in a straight line, was ruled off the track; besides every one had a hobby-horse that was trotted out periodically; so every observing reader, after getting posted on the peculiarities and netions of the editors, could almost predict the precise answer to any given question. How he long, theoretical homilies of such papers compare with the short, terse and concise farm etters in the KANSAS FARMER, every one rich with fact—a nut full of meat and nourishment! They make one feel weighted with a newly acquired wealth, like the possession of silver dollars as compared with paper promises to pay.

I was interested in Stoner's cattle shelter-s good thing for the first year, but like Anderson's hay or straw roof much the best, as being more tidy and business-like; and Schlichter's articles on firewood, and Hanan's tree experiences, are all more valuable than patented receipts, or tree-peddler's "chin music," and not near as costly.

I see that the wheat-jointing question I asked some time ago is being quite definitely settled, and now I will ask another: Is it a fact that timber shelter belts are a good thing for either orchards or wheat? Now don't be astonished I once believed in shelter belts, but now I waver, so many facts seem to point the other way. Let us hear about it. E. A. PECK.

Great Bend.

ED, FARMER: A letter you published recently from Illinois, saying the writer would like to hear oftener from Great Bend, reminds me I have not written for some time.

To go back a little and mention a few important things, I may state first that the telegram sent out from New York about three weeks ago, relative to the building of three railroads from McPherson, Pueblo, and Wichita, to this point, had a good effect almost immediately, for the very next day the Santa Fe road raised the em bargo that had been held on freights for the last two or three months, and now they take on freights for any point beyond Pueblo, and furnish all the cars needed for west-bound freights. There has been (and there is even yet) much freight—hay, flour, etc.—awaiting shipment west, and when it was desired to ship beyond tend to the transfer at Pueblo, and reship to an-

other point. About forty or fifty carloads of baled hay have been sent west from her since fall, and several carloads of flour. There is still about thirty or forty carloads of hay already baled here and at Ellinwood, awaiting transportation. The price of hay for baling has been about three dollars per ton. The demand is now abated in consequence of a jam at Pueblo. The mills here burn hav, and have been doing so al winter. One mill burns about two tons per day, and makes as much steam as two tons of coal. The price of rough hay for fuel is from \$1.25 to \$1.50 per ton. This hardly pays the wear and tear of the mowing machine, but it furnishes employment to several needy persons, and this class is quite numerous on the farms this winter. The cost of a ton of coal de livered here is about \$7, so there is a saving of about \$4 per day, minus the expense of an extra hand to handle the hay. This would leave a net saving of about \$3 per day, and the mill does as much work as ever.

The weather has been so fine that wheat is doing nicely. This is encouraging, yet crops were so bad last year that living on farms must needs be very close until the return of harvest Wheat is worth now about 80c; oats, 35c; corn, 25c. There are few people totally idle; most of the folks find some little employment, even though not very remunerative.

The news of Secretary Gray's death is received with a pang of sorrow. His work was well and nobly done. A man's greatest satisfaction is realized in seeing a good work of his own well done. His friends can have the consolation of knowing that his work was done faithfully and with all his unselfish energy.

To come back to my starting peint—the news telegram concerning the stock necessary to build the road being all taken up, gives much en-DIBETA SIGMA.

Egyptian or Rice Corn.

In the FARMER of February 4th, D. W. Kingsley asks for a report on the Egyptian rice corn, and some one to supply dealers. I have none to sell to dealers, but I think I can furnish seed to the readers of the FARMER. I willsend as long as I have any if they will send stamps to pay postage.

There was a good deal of rain in this neighborhood, and it is a very sure crop, the dry weather having very little effect on it. It will yield from ten to twenty-five bushels on sod, nd more on old ground, if cultivated.

I do not think it would be a profitable crop to raise in the east where there is plenty of rain to raise Indian corn, as the latter will yield more and is relished more by stock. This is my experience and my neighbors', with rice corn.

J. H. Scott, P. M. Middle Branch, Hodgeman Co., Kansas.

AURORA, Cloud Co., Feb. 8th .- Having waited some time for a more able pen than mine to report items from this part of Kansas, and seeing nothing, will try and furnish something of interest.

The weather is all that we could wish, being warm and pleasant most of the time. Farmers have been taking advantage of the fair days by plowing, and drilling in wheat, thinking that pork, \$3.30 to \$4.00. There is but a few hogs the late sown will make as good a crop as that sown earlier in the season.

I have taken a trip through Mitchell county ato Osborne county, and found the roads in excellent condition; no mud or ruts, which is quite a contrast to the roads in the east, as they are reported very muddy and rough at present We find that grain looks much better in our county than further west, I suppose on account of the rains being more plentiful here last fall. We have had very little snow this winter, but the last of January there was a slight rain, accompanied by thunder and lightning, which finally turned to sleet.

Some of our enterprising once, having in view the juiciness of spring chickens, have set their hens, but we think we had better wait awhile, for we will surely have cold weather

We were very much interested in Mrs. Walter's communication, and hope she will write again. Tell us something of duck-raising next time, Mrs. W., if you have had experience in that branch of poultry raising. We would also like to hear from some one who has tried raising geese in this country, whether they are more destructive than profitable, or otherwise. Stock of all kinds seems to look well here. Pork is bringing a reasonable price, being about \$3.50; butter is very cheap, 10c, and eggs 8ccheap for the time of year; corn, shelled orings 18c.

We wish the FARMER success and abundance

JEWELL CITY, Feb. 8.-Farmers in this neighborhood will fight their own interest (not intentionally, but because they have got so in the habit) by reading nothing but politics, and if you ask them to subscribe for a farmers' paper they will feel insulted. There is no other class of men that is so afraid of spending a dollar to advance their own calling, as the farmer. SUBSCRIBER

NAOMI, Mitchell Co., Feb. 5 .- January was the pleasantest month that I ever saw in midwinter in any locality. Many farmers were plowing and sowing as busily as though it were March. Some days one could ride with comfort in a light coat and bare handed, and many nights there was no frost. We had no rain or snow to wet the ground. Wheat started up some, and in some cases started up where it had not grown in the fall. On the 27th of January Pueblo, an agent had to be sent in person to at- hail and snow, enough to make the ground a we had thunder and lightning, with a little little sticky. Yesterday morning the ground was white, but it soon changed color again. It freezes now every night, but is pleasant winter weather. We feel a little uneasy about late sown wheat, that has just sprouted. A good rain would be a great blessing, generally, in this county. We look for but few peaches the coming season, as but few fruit buds formed.

I was surprised, on asking some of my neighbors to subscribe for the FARMER and the American Young Folks, to find how poor they were. They had no fault to find with the papers, but 'It seems like it is so hard to get the money," and "I take our county paper now," and "If my boys had a new paper every night they would not read it," and such remarks. Some could not get time to read what papers they had. Some are really well supplied, but it is not generally the case. I find the school children eagerly accept of such papers as I offer to lend them, but many of their parents do not think it necessary to furnish them with good papers, or even a needed supply of good school books. *1 think that while we feed and care for the body, we should not starve the mind, as many are doing. F. W. BAKER.

NORTONVITLE, Jefferson Co., Feb. 8.-We have had fine winter weather for the last month; not very cold; 5 degrees above zero has been the coldest morning for the last five weeks. January 29th we had a good rain. There is some complaint about the wheat being injured by dry weather. Some pieces of very late sow ing are entirely killed, but where it had made a good mat-on the ground it is not much injured

This has been a fine time for feeding steers and they look well. A good lot was sold the Stock cattle of all kinds are in good cendition.

The death of Hon. Alfred Gray causes a feel- like testimonials keep coming in.

ing of regret by all who knew him in this community, and the expression is common "that it will be hard to fill his place." I have all confidence in the newly elected secretary.

JOSHUA WHEELER.

FENWICK, Republic Co., Feb. 2.-The citizens of this county seem jubilant over our present prospects for a railroad, which is being surveyed from Belvidere, Nebraska, via. Belleville and Scapo, in this county, and apparently pointing toward Minneapelis, in Ottawa county. As some of the FARMER's contributors have spoken in regard to county railroad bonds, I will say this county is free from railroad bonded indebtedness, and as the road now under survey asks no bonds, our county will likely remain free. This county has heretofere polled a fair majority against railroad bonds, and I think a much stronger could be polled if necessary.

The only fall of snow that we have had this winter, fell January 28th, perhaps one-eighth of an inch deep, and on January 29th we had a heavy sleet, accompanied by thunder and lightning.

Present prospects are indicative of a bountiful harvest of winter grain.

The oorn crop is gathered, and the yield in this locality was heavier than anticipated. Corn is selling at the railroad at 18 to 22 cents; in this locality to go into market. The bulk having gone or been slaughtered. The amount of wheat on hand will not exceed bread and seed. The main bulk of the corn crop has been seld. Stock generally is doing well. The general health of the country is good. Some few farms are changing hands at fair figures.

A Het Water River.

According to the Scientific American, the proector of the Sutro Tunnel is of the opinion that the hot water which is so troublesome in the Comstock mines comes from a depth of ten or fifteen thousand feet, where the rocks are at a high temperature; also that there must be some connection between the water of the Comstock lode and that of the boiling springs at Steamboat, six or seven miles distant.

One of the great advantages of the tunnel is the means it affords for draining the mines. The tunnel discharges about twelve thousand tons of water every twenty-four hours. To lift this water to the surface would cost not less than \$3,000 a day. Some of the water has a temperature of 165°; where all the water mingles, four miles from the mouth of the tunnel, the temperature ranges from 120° to 135°. If left to flow through the open tunnel this water would so fill the air with steam as to make the tunnel impassable. In flowing the four miles through a tight flume made of threeinch yellow pine, the water loses but 7° of heat. At the mouth of the tunnel the water is conducted sixty feet down a shaft to a water wheel in the machine shop, whence it is carried off by a tunnel eleven hundred feet in length, which serves as a tail race. From this tunnel the water flows a mile and a half to the Carson

This large flow of warm water is now used for many purposes, the first to utilize it having been beys who made small ponds to swim inpioneers, it may be, in establishing a system of warm baths, which may ultimately become a great sanitary resort. The water can also be turned to account in heating hot-houses and for irrigation. The tunnel company have a farm of over a thousand acres which, when properly watered, is very fertile. In course of time there will probably be many acres of fruit and vegetables under glass at this point, all warmed and watered by the tunnel water .- Scientific Amer-

"Good care makes good stock" is a maxim that has more in it than many professional breeders are willing to admit. It will not inleed work an entire transformation in the naure of an animal—it will not make a first-class peef animal of a Jersey cow, a race horse of a Clydesdale, a Merino sheep of a Cotswold, nor Berkshire pig of a Suffolk-but good care s essential in order that any of the breeds of my kind of stock shall attain to their best esate. Good care will also hide many of the deects, and atone for many of the faults of stock that would be otherwise classed as very poor of its kind; and will make even the poorest sort of "scrub" look passably well. So important a part does this play in the business of stock raising, that no man need expect to attain even moderate degree of eminence as a breeder who is not painstaking and careful in the management of his stock .- Nat. Live-Stock Journal.

W. H. Mann has just returned from Texas. where he has been for several weeks for the purpose of getting osage orange seed. Mr. Mann formerly lived in Texas, where the osage is a native tree. He came to this state over 30 years ago with the first shipment of seed ever prought to Illinois, and has continued importing seed and growing plants to the present time Parties wanting either seed or plants should not fail to correspond with him .- Gilman, (Ill.)

The Evidence Accumulates.

H. J. Footner, of Toronto, Ont., certifies that Waner's Safe Pills have cured him of billiousness and sleeplessness. G. A. J. Gadbois, of Brookville, Canada, certifies that the Safe Pills and Safe Bitters have cured him of malarial difother day at Nortonville for \$4.50 per hundred. ficulties contracted in Texas. E. J. Campbell, of Philadelphia, certifies that the Safe Pills and Not many fut hogs going to market from this Safe Kidney and Liver Cure have nearly cured point; they are worth \$3.90 per hundred.

White House than has she. It is worth a journey to Washington to see so simple and unconventional a lady at the very head of the first American society. Her portraits do her scant justice. Her face is wonderfully mobile; it constantly impresses her own gennine enjoyment in the enjoyment of her guests. Her laugh is contagious; and it would be as impossible for a photograph or even a portrait to picture the life that sparkle in her face as for a picture to portray the sunshine that dances on the dimpled surface of a lake which ever and anen breaks out into a quite rippled laughter.

Her social victory is complete and has been won after a hard battle. The story has been told before but it is worth retelling. She came to Washington determined not to offer wine to her guests; this was the determination of a lifetime, and she would not and could not abandon it. To give a state dinner without wine was declared to be impossible; all Washington society was opposed to her; I believe it even became a cabinet question. For a year she was a target for the sort of arrows which it is so hard for any woman to bear unflinehingly. But she bore it all; by her patient persistence and her tact she carried the day and conquered Mrs. Grundy in her own field. She never has offered wine; Washington follows her lead; and I doubt whether any state capital, not excluding the capital of Maine, is a more thoroughly temperance city than Washington, to-

The exclusion of wines and liquers from the capitol dates from the days of Senator Wilson, but I judge that public sentiment has grown stronger, and that the exclusion is more complete now than ever before. As you go to Capitol Hill along Pennsylvania avenue, you come to a liquor shop with a sign extending out over the sidewalk. On it are the words: "The Last Chance." On the reverse side, seen as you come back from the capitol, are the words:

"The First Chance." Possibly a man who understands the appropriate signals can find a chance for a drink at the house or senate restaurant; but nothing stronger than lager is drank publicly .- Rev. Lyman Abbott's Washington Letter in the Christian Union.

The Calico Struggle.

It will amuse our readers to know that so simple and common an article as calico had to fight its way for more than forty years before it could get into general use and favor. The name "calico" is supposed to come from Calicut, in Malabar, where, perhaps, far back in East Indian antiquity, the making of spotted eloth by stamping colors on it was first practiced; but the first calico printer in Europe (as far as known) was Jacques Deluse, or as the Yankees would call him, Jimmy Rush. As long ago as the seventeen hundred eighties, Jimmy had his business going.

"At Neuchatel, in France, where they prepare Cheeses that set us longing to be mites.

and his little factory stood in the town of Bied, in that canton, which by the way, is not part of France now, but part of Switzerland. Everybody looked askance at Jimmy's bright colored printed cottons, for they were a startling innovation. People wore linen, woolen and silk then, and the merchants who dealt in these kinds of goods did all they could to set their customers against the new article and its maker. They knew their trade would suffer terribly if the public began to buy his pretty cloths, made of so much cheaper material. They told lies about him; they influenced the government to tax his business so heavily that he could make The Great Cough Remedy, Marsh's Golden Balno profit; and when he or his partners tried to put up another printing concern in Mulhouse, the authorities would not let him have a spot on a stream to build a watermill.

No shopkeeper in France or Switzerland would allow a yard of calico among his wares, or if any were inclined to trade in the new fab ric, they dared not do it; and the prejudice ran so high that, if a woman was seen walking out with a calico dress on, she was hooted, and even attacked and beaten till she was driven off the

But a still worse enemy that the new trade had to encounter was superstition. Such was the foolish ignorance of the age that many pecple really believed that calico-printing was a black art, and inspired by Satan himself. Pamphlets were circulated and read, filled with horrible statements about it; and stories were told of Deluze's colors as absurd as the old bugatoo of Guttenburg and Faust's "bloody ink."

A hard time poor Jimmy Rush had of it, certainly, and it is a wonder how he lived, and made his business. But he did, though he was an old man before he saw anything like triumph. That came somewhere towards the middle of the eighteenth century, when the notorious Madame de Pompadour saw one of his bright calicoes, and ordered a quantitity to make lambrequins of in her palace at Versailles.

From that time the calico trade flourished, for she set the fashion for France. It spread from Bied to Alsace, and from there all over Europe, all over the civilized world.

Advice to Consumptives.

No man, however uncleanly, would drink muddy, dirty water. A party which occupies a room for hours, breathing the same air, might be compared to a party of bathers drinking the water in which they bathe. The patient must keep the window of his bedroom open. Night

Total Abstinence in the White House:

air is fresh air without daylight. In close, crowded rooms, the patient suffering from lung complaints breathes consumptively. By taking these precautions and using Dr. Pierce's Golden Medical Discovery an 'Pleasant Purgative Pellets, fully one-half of the cases of lung complaints would be cured in six months. For cough and irritation of the lungs do not always indicate the presence of consumption although.

The dairy wany of which are injurious. The genuine Brown's Bronchial Troches are sold only in boxes.

Distance All Competitors.

The dairyman who uses gilt edge butter maker will increase his product 6 per cent, imindicate the presence of consumption although tion has already become deeply seated in the system, this is the most efficient course of treatment that can be pursued outside of any institution that provides special facilities for the treatment of this disease. Dr. Pierce's celebrated Invalid's Hotel is such an institution. Send stamp for descriptive paraphlet containing sleep atamp for descriptive pamphlet containing also a complete treatise upon consumption, explaining its causes, nature, and the best methods of treating it, together with valuable hints concerning diet, elothing, exercise, etc., for consumptives. Address World's Dispensary Medical Association, Buffalo, N. Y.

If people who suffer from the dull stupidity that meets us everywhere in spring, and too of ten in all seasons of the year, knew how quick it could be cured by taking Ayer's Sarsaparilla to purge the bile from their systems, we should have better neighbors as well as clearer heads to deal with.

Hearseness.

All suffering from irritation of the throat and hourseness will be agreeably surprised at the al-most immediate relief afforded by the use of Brown's broachial troches.

Early Stages of Consumption.

If taken in their earlier stages of the progress of pulmonary affections can almost always be arrested by the use of Compound Oxygen, which gives a higher degree of vitality and enables nature to contend successfully with disease. Our "Treatise on Compound Oxygen," in which numerous cases of relief and cure is cited, is sent free. Address, Drs. Starkey & Palen, 1112 Girard street, Philadelphia, Pa.

Haunted Me.

Debt, poverty and ansfering haunted me for years, caused by a sick family and large bills for doctoring, which did no good. I was completely discouraged, until one year ago, by the advice of my pastor, I procured Hop Bitters and commenced their use, and in one month we were all well, and none of us have been sick a

A Liberal Offer.

The Voltaic Belt Co., of Marshall, Mich., have such implicit confidence in their Electro-voltaic Belts, Bands, Trusses, and other appliances, that they offer to send them, on thirty days trial, to all persons suffering from nervous difficulties, rheumatism, dyspepsia, ruptures, etc., etc. By their use cures are speedily effected, and all sufferers should send for their illustrated papullet.

The Weekly Capital for 1880.

The WEEKLY CAPITAL for 1830 will be found one of the most desirable family newspapers. The present enlarged form will be preserved, giving the readers a clear, clean faced, easily-read type, and the large amount of interesting news, political, summary, literary and domestic matter, the best ever offered in Kansas for the low price of

ONE DOLLAR PER YEAR. OUR LOW CLUB RATE.

Ten copies, to one or more post offices, for \$9.00, and an extra copy to club agent. Names must all be sent at one time.

A sample copy sent free to any address.

J. K. Hudson,

Topeka, Kansas. 'P. S. In writing for a sample copy, send the names of half a dozen of your neighbors who read or who ought to read, and we will send them copies to examine.

"Eminent Success"

sam, " Has Given Entire Satisfaction in Every Instance."

"I have used your preparation of Golden Balsam with eminent success."—D. H. Ditzler,

M. D., Fort Scott, Kan. "Your Golden Balsam has given entire satisfaction in every instance."--Hutton & Campbell,

druggists, Nevada, Mo.
"I have been using some of your Golden Balsam for the past two months, for weak lungs, and I think it helps me much, so that 1 want more of your medicine."—H. H. Jackson, Oskaloosa,

"Your Golden Balsam gives good satisfaction and sells readily, especially to those who have already used it. I am out and wish to have more of it."—Fred. Heck, druggist, Humboldt,

'Your Golden Balsam is truly a valuable med-"Your Golden Isasam is Iruly a valuable medicine. It has done wonders for me, I can cheerfully recommend it to all suffering with hard cough or weak lungs."—Simeon Fawcett, Kansas City, Mo.

Marsh's Golden Baisam will cure your cough.

It you are suffering with any throat or lung affection don't fail to try it. Sample bottle free. Large bottles 50 cents and \$1. For sale by Swift & Holliday, and W. N. Angle, in Topeka and by all prominent druggists in the west.

Prejudice Kills.

"Eleven years our daughter suffered on a bed of misery under the care of several of the best (and some of the worst) physicians, who gave her disease various names but no rewho gave her disease various names but no relief, and now is restored to us in good health by as simple a remedy as 'Hop Bitters, that we had poohed at for two years, before using it. We carnestly hope and pray that no one eles will let their sick suffer as we did, on account of prejudice against so good a medicine as Hop Bitters.—The Parents.

An Article of Merit.

Brown's Broncial Troches are the most popular article in this country or Europe for throat diseases and coughs, and this popularity is based upon real merit. Imitations are offered

The dairyman who uses gilt edge butter maker will increase his product 6 per cent, improve its quality 20 per cent, and distance all competitors who do not use it. 25 cents worth of the powder will increase product and market value of same \$3.00. Can you make a better investment? Sold by grocers, druggists and general storekeepers. Send stamp for Hints to Rutter Makers. Address, Butter Improvement Co., Buffalo, N. Y.

Marsh's Golden Balsam.

Cures coughs, colds, bronchitis, consumption, Cures coughs, colds, bronchitis, consumption, sore throat, eroup, whooping cough, horseness, and all diseases of the throat, lungs, and chest. Don't fail to try this wonderful medicine. Sample bottles free. Regular sizes 50 cents and \$1. Thousands of bottles have been given to the affilicted to prove its extraordinary merit. You can have one. Ask your druggist for it. Two doese will give r-lief. A large bottle will do wonders. For sale by Swift & Holliday, and W. N. Angle, Topeka, and prominent druggists everywhere.

Chew Jackson's best Sweet Navy tobacco.

Eight and nine per cent. interest on farm

Eight and nine positis Shawnee county.

Ten per cent. on city property.

All good bonds bought at sight.

For ready mency and low interest, call en

A. Parecourt & Co.

PRESCRIPTION FREE

For the speedy cure of Seminal Weakness, Loss Manhood, and all disordess brought on, by indiser-tion or excess. Any Druggist has the ingredents: Addioss DAVIDSON & CO., 78 Nassau St., N. Y.J.

Down Down with high prices, Genuine Sing-er or St. John, two drawer, drop leaf sewing ma-chines for \$35 at Frost Bros'. Silver Lake.

An Old Man Rejuvenated.

"Peter Showerman, of Batavia, N. Y., certified Sept. 15, 1879, as follows: "For forty years I have suffered with kidney and liver difficulty, being obliged to void urine as often as once in 30 minutes, and have also been a great sufferer from palpitation of the heart. I am now using your Safe Kidney and Jäver Cure, and can truly say, at 70 years of age, that it makes me feel like a new man."

M arkets.

Markets by Telegraph, February 16. New York Money Market.

RAILROAD BONDS.—Generally higher, with the chief inquiry for Erie, from Mountain, and Chesapeake and Ohio issues.
STATE SECURITIES—Steady.
BAR SILVER.—\$1 1314.
STATE SECURITIES—Dull,
MONEY —> 10 6 per cent.; closing at 5 per cent.
PRIME MERCANTILE PAPAR—5 to 5)4 per cent.
STRELING EXCHANGE—B, B., firmer; 60 days, \$4 834; sight, \$4 86.

New 5's... New 4½'s (registered)... Coupons... New 4's (registered).... PACIFIC SIXES—95; new 1241/8.
MISSOURI SIXES—\$1 10,
ST. JOE—\$1 05,

St. Louis Produce Market.

FLOUR-Higher: fancy. 6 12½ cash; 6 25 April; choice, 35 22½ bid cash; 5 82½ February; family 5 77½ bid cash; 5 80 February; 5 82 March; 6 90 April; XXX 5 95 cash; 5 75 March. WHEAT-Dull and higher: declined, No. 2 red, 121½ to 127½ cash; 128½ to 1 27¾ March; 131 April 121½ March; No. 3 dol. 21½ bid. Corn—Better and slow; 53½ to 33½ cash; 34½ to 34½ March; 35½ to 33½ c April. OATS—Higher; 32½ c cash; 33½ c March; 36¾ to 36¾ May.

Rye—Firmer, 74c bid.

Rye—Firmer, 74c bid.

BARLEY—Dull; Ohio full, 95c to \$1.

WHINSKY—Steady, 1 07.

LEAD—Unchanged; saicable at 5 75.

BUTTER—Firm; Dairy, 22 to 28c.

EGGS—Firm; 11c.

PORK—Higher; \$12 for job lots; 11 70 February; 12 05 north.

DRY SALT MEATS—Firm and better; 3 90 to 4, 640 to 650, 655 to 6*5.

BACON—Firmer; \$4 80; 7 20 to 7 25; 7 40 to 7 45.

LARD—Steady; \$7 10 asked.

New York Live Stock Market.

BEEVES—Receipts 4,100; market rather slow but firm r, and \$1 to 1 25 per head higher than on Friday; ex reme range, \$7 75 to 10 50, with a few fancy aged oremium steers at 11 00; exporters, used 1,450 at \$ 00 0 11 00 io 11 00, SHEEP--Receipts, 9,700; demand fair; prices 13 to 14c higher, with large business; 4 50 to 6 to for sheep; 6 85 to 7 65 for lambs. Swinz-Receipts, 11,100; no sales of live weight; cominally steadyat 4 60 to 4 90 per 160 pounds.

New York Produce Market.

New York Produce Market.

Flour—Quiet; superfine western and state 300 to 5 50; common to good, 5 40 to 5 75; good to tholee, 5 80 to 7 75.

WHEAT—Dull; rejected spring, 1 22½; ungraded spg. 130; ungraded red, 1 42½ fo 1 50, No 2 do, 1 48½; No. 2 white, 1 46; No. 1 do, 1 48½; To 1 50, No 2 do, 1 48½; No. 2 white, 1 46; No. 1 do, 1 48½; To 50; No. 3, 56½ to 56½ OATS—Active and firm; mixed western 47½ to 56½ OATS—Active and firm.

SUGAR—Quiet in firm.

EGGS—Western 13 to 15c.

POTR—Quiet; new mess 12 25 to 13 37½.

BEFF—Dull and unchanged.

GUT MEATS—Steady; long clear middles, 6 87½; LARD—Moderate; Prime steam, 7 61½ to 7 70.

BUTTER—Dull; Western 15 to 29c.

CHIESES—Firm; western, 1 to 14½

WHISKY—Neminal; 1 10.

Kansas City Live Stock Market.

CATTIX—Receipts, for 48 hours, 155; shipments, 340; market steady; native shipping steers, averaging 1,415 to 1,577 pounds, sold at \$4.50 to 5.00; stockers and feeders, \$3.00 to 0.3 75; cows, \$2.00 to 3.00.

Hors—Receipts for 48 hours, 688; shipments, 279; market steady; sales ranged at 3.80 to 4.10.

SHEEF—Receipts, none; shipments, none, market firm and unchanged.

Kansas City Produce Market.

WHEAT—Reccipts, 1,500 bushels; shipments, 4,122 bushels; in store, 741,271 bushels; market unsettled No. 2, 1 15 bid; No. 3, 1 043; to 1 043; No. 4, 1 033; Conn—Reccipts, 14,725 bushels; shipments, 10,53; bushels; in store, 204,970 bushels; inarket steady; No. 3 mixed, 28c; No. 2 white mixed, 293;; rejected, 253;

nid.
OATS—No. 2, 30 %c bid, 35c asked.
RYE—No. 2, 50 bid; 65 asked.
BARKY—Nominal.
BUTTER—Receipts fair and market weak; 20c for
Boos—Weak and lower at 10c per dozen.

Liverpool Market.

Breadstuffs-Market unchanged. Flour-9s 9d to 12s 3d. WHEAT-1Winter, 10s 6d to 11s 4d; spring, 10s 2d to 12s 10d. Conn-Old, 5s, 7d; new, 5s, 3d OATS-6s, 2d.

OATS-6e, 2d. PORK-59s BEEF-80s BACON--Long clear middles, 3is 6d; short clear, 36s LARD--38s 6d

St. Louis Live Stock Market.

Hoss—Active and higher; light shipping \$410 to 4 20 mixed packing \$4 25 to 4 40; butchers to select, 4 40 to 4 50; receipts, 4,000; shipments 600.

CATILE—Shipping grades a shade off; butchers stuff steady; choice heavy steers. 5 00 to 5 10; good to prime, 4 60 to 4 90; fair to good fleshy steers, 4 10 to 4 50; cows and heifers, 2 75 to 3 50; corn-fed Texans, 3 00 to 4 15; feeders, 4 40 to 4 25; export steers would bring 2 75 to 3 50; receipts 1,500, shipments. 100.

SHERP—Searce and wanted; good, 4 40 to 4 80; prime, 5 00 to 5 60; choice, 5 50 to 6 00, receipts, 600; shipments, none.

Chicago Produce Market.

Flour-Dull and nominal
WHEAT-Unsettled, but generally higher; closing
strong; No 2 red winter, 182; No 2 spring, 1 21½ cash.)
\$1 22½ February; 1 29½ to 1 22½ March; \$1 23 April
No 3 spring, 1 07; rejected 50c.
Cons-Dull, weak and lower; 25c bid cash: 35%c
March; 40c May.
OATS-Active but lower; 31 to 32 cash; 31½ April; 35%c
May

RYRQuiet and weak; 75% to 76 BARLEY-Dull and lower; 80c PORK-Active but weak and lower and unsettled; 11 15 to 11 20 each; 11 25 to 11 27/4 March; 11 42/4 bid

April Lab-Active but weak and lower; 6 85 to 6 87½ cash 6 92½ to 0 95 March; 7 02½ to 7 05 April Butk Maars-shoulders, 3 95; short ribs, 6 20; short pleat, 6 30 Wrisky-Steady, 1 07

Chicago Live Stock Market.

Hoss—Receipts, 15,000; shipments, 5,400; firmer; not quotably higher; mixed packing, \$4 15 to 435; light \$4 20 to 4 85; choice heavy, \$4 40 to 4 65, closed firm; good clearance.

CATLE—Receipts, 8,200; shipments, 2,700; good heavy cattle quiet and wesk-for lack of competition, 5 00; common to good shipping, \$4 00 to 4 80; butchers fairly active; and firm; cows, 23 to 3 55; buils, 2 80 to 4 00; steers, 3 90 to 4 00; caxen, 2 3 30 to 4 05; feeders and stockers quiet and weak, 2 90 to 4 00.

SERENT—Receipts, 1,200; shipments, 700; quiet and steady, 4 00 to 5 40

Atchison Market.

Moss---Receipta' 1,300; shipments, 800; market active and lower; light, 3 60 to 3 75; mixed packers, 3 70 to 8 90; choice heavy, 3 90 to 4 05.

Denver Market.

PLOUR, GRAIN AND HAY. FLOUR, GRAIN AND HAY.

HAY—Upland, 21 to 24; second bottom, 18 to 20; bottom hay, 16 to 18.

FLOUR—Colorade, 3 20 to 3 50; Graham, 3 00 to 3 25

MRAL—Bolted corn meal, 1 60.

WHEAT—2 20 \$\pi\$ wit.

CORN—1 20 to 1 25 \$\pi\$ cwt.

CORN—1 30 to 1 40 \$\pi\$ cwt

DATS—Colorado, 2 00 to \$ 15; state, 1 50 to 1 85 \$\pi\$ cwt

BARLEY—1 70 to 1 25 \$\pi\$ cwt

BARLEY—1 10 to 1 15 \$\pi\$ cwt

PRODUCE, POULTRY VEGETABLES EGGS-Per dozen, ranch, 20 to 30c; state, 14c Butter-Ranch, \$15, 20 to 40c; creamery, 35 to 40

DUTTER—Ranch, F. 15, 50 CO NO., October 15 CO NO., 10 to 15 CC NO., 10 to

Chicago Wool Market.

Wool.-Tub-washed, bright, 55 to 60e per lb; do dingy and coarse 50 to 55c; fisece washed medium, 48 to 52; do fine, 45 to 48c; do coarse, 45 to 47c; unwashed medium 35 to 38c; do coarse, 33 to 35; do fine blight, 28 to 38c; do heavy, 24 to 28c; bucks' fisece 20 to 22c; burry and poor conditioned lots at 3 to 5c less.

St. Louis Woel Market.

Woot.—Prices quotably unchanged. We quote: Tub washed—choice 56 to 561/4c, medium 50 to 52c, low and dingy 45 to 47c. Unwashed-medium 33 to 35c, cearse 25 to 30c, fine 25 to 28c. Burry, black and cotted, 3 to 10c per lb less.

Topeka Hide and Tallow Market. S—Green Green, damaged Green, calf Bull and stag Dry flint prime
Dry Salted, prime
Dry damaged
TALLOW
SHEEP SKINS. Topeka Butchers' Retail Market. Sirioin Steak per lb.

Round ""
Ronsts ""
Fore Quarter Dressed, per lb.
Hind By the carcass ""
N—Chops per lb.
Roust

PORK
PORK
POULTRY—Chickens, Live, per doz.
"Chickens, Dressed, per lb.
"Turkeys, and Ducks: ".
"Geese. Topeka Produce Market. Grocers retail price list, corrected weekly by J. A. Lee Country produce quoted at buying prices.

APPLES—Per bushel 1.25@1.60
BEANS—Per bu—White Navy 1.90
"Medium 1.76
Common 1.50
BUTTER—Per lb—Choice 22
"Medium 1.65
CHEESE—Per lb 10@12
EGGS—Per dox—Fresh 100
E. R. POTATOES—Per bu 50@60
P. B. POTATOES—Per bu 75
SWEET POTATOES 1.25
ONIONS—Per bu 2.60
CABBAGE—Per dozen 1.00@1.50 Topeka Retail Grain Market.

Wholesale cash prices by dealers, corrected weekly by T. A. Beck & Bro. by T. A. Beck & Bro.

WHEAT—Per bu. spring.

"Fall No 3.

"Fall No 4.

CORN—White Old

"Yellow

OATS — Per bu.

R Y E — Per bu.

BARLIEY—Per bu.

FLOUR—Per 100 lbs

"No 2.

"No 3.

"No 3.

"No 3.

"Yellow

CORN CHOP.

RYE — Per bu.

BARLIEY—Per bu.

FLOUR—Per 100 lbs

"No 2.

"No 3.

"No 3.

"No 3.

"No 3.

"No 3.

"No 4.

"RYE — Per bu.

BARLIEY—Per bu.

"RYE — Per bu.

"RYE — P

Hew Advertisements.

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

50 Pin-a-4, Chromo, Lity, Lace, Marble, etc., Cards in case, 10c, GLOBE CARD Co., Northford, Ct. 50 Perfumed cards, best assortment ever offered, 10c. Agts Outfit, 19c. CONN CARD Co., Northford, Ct.

50 Chromo, Glass. Scrol!, Wreath and Lace cards, 10c Try us. CHROMO CARD CO. Northford Ct. 50 Motto, Gold, Floral, Seroll, Snowfake cards, 10cts. Agts Samples, 19c. Stevens Bros, Northford, Ct.

PLEGANT AUTOGRAPH ALBUM, gilt covers, 48 pages, I illustrated with birds, scrolls, etc. in colors, and 47 Select Quotations, 15c: Agent's outfit for cards, over 60 samples), 10c. Davids & Co, Northord Ct.

50 Chromo, Tortoise Shell, Cupid, Motto, Floral cards, 10c; outfit 10c. Hall Bros, Northford Ct:

PHOTOGRAPH VISITING CARDS: Circular and 60 samples for 10c: Seavy Bros, Northford Ct.

12 Elite, Gold Bow, Bevel Edge cards 25c., or 20 Chinese Chromos, 10c. J B Husten, Nassau, N Y BUTTER A New Treatise on Butter making FREE. Address W. P. EMMERT, Freeport, Ill.

CHERRY Fear, Plum and Peach trees, Grape Vines and small fruits and Best General Nursery Stock in the West Price list free; KELSEY &

Osage Orange Seed,

Crop of '79. Presh from Texas. Send for sample and prices. Also fine lot 4-year-old apple trees cheap.
W. H. MANN & CO, Gilman, Ill.



Evergreens & European Larch.

I offer a very large stock of Evergreens and Larch-large and small—all nursery grown. Prices very low. Price-list free. Address D. HILL, Dundee Nursery, Kane Co, Ill.

The National Butter and Cheese Color

TREES AND FLOWERS!

THE BLOOMINGTON NURSERY. Principles 28 years, 600 Acré. 18 Greenhouses.

43 We offer for distribution New General Descriptive Outlogue, 28c: New Pant Outlogue and Pice-Ist Free, BAIRD & TUT'11.E, Agents, Bloomington, Ill.

A. Z. BLODGETT. WAUKEGAN. ILL., IMPORTER AND BREEDER OF

Imported and pure-bi d stock for sale, Send for Catalogue.

Pure Bred Poultry

Of the following breeds for sale by J. M. Anderson, Salina, Ks

Bronze Turkeys, Pekin Ducks, Partridge Cochins and white Guineas. Eggs from any of the above breeds, and from Silver Duckwing Bantams. Write for prices.

Cash Sale.

On February 26th, I will sell at my residence at the Buffalo Mound farm, 7 miles south of St. Mary's Mission and 4 miles east of Newbury, the following property: 1 span heavy brood mares, 1 span match 3-year old Norman colts, 1 good 4-year-old work horse, 5 to 7 good youing horse; 5 or 6 good ponies, 1 stallion 3 years old, 1 2-year-old mule, 1 pair extra fine 4-year-old mule; 1 thorugh-bred bull 3 years old, 3 1-year-old grade bulls This sale is positive and for eash. Sale to commence at 10:30 a.m., F. L. RAYMOND.

MAMMOTH Cash Stock Sale.

On Wednesday, Feb 25, '80, I will sell at my residence in Maple Hi.1 Township, 5 miles northwest of Dover, and 6 miles west of E G Moon's, all of my stock and personal property, for cash to the best bidder, consisting of 8 fine grade milen cows, 50 head thrifty stock hegs, 4 fine thoroughbred cows, 4 fine grade 2 year-old Heifers, 14 No 12-year-old steers, 6 No. 11-year-old steers, 4 No 11-year-old heifers, 1 span 2500 pound farm horses, 1 span 2500 pound farm horses, 1 span 2500 pound farm horses, 2 5-year-old moving ma. chine, 1 sulky rake, 1 new sulky cultivator, 1 new harrow, 2 steel beam stirring plows, 2 farm wagons, 2 sets double harness, 75 bushels peach-blow potatoes, 1500 bushels corn, 50 tons good hay. Also chains, forks, hoes and household furniture, (consisting of one nearly new coeking stove, bedsteads, chairs, tables, stands, and everything in a household,) which will be sold to the best bidder for cash, as I leave for the cast at once, This is a rare chance. Sale commences at 10 a m sharp.

A J Hungate, Auctioneer.

& STRAW PRESSES.

DEBERICK & HAY AND STRAW PRESSES are guaranteed cheaper at price than any others at a gift, or no sale. If inexportenced purchasers are confused by manufacturies of inferior machines who claim their presses, re best, then order a press of each on condition that you keep the best, and advise all that DEDERICK'S PRESS will be there. The absence of all others will then convince you that DEDERICK'S PRESS will be there. The absence of all others will then convince you that DEDERICK'S PRESS are beyond competition. Grand Centennial and Paris world's Fair Prices, and all the United State Fair Premiums for years past for Dederick's Presses. Beware of presses infringing Dederick's Patented Press and Bale. Send for catalogue.

N. B.- The attention of the public is respectfully invited to other advertisements of Hay Presses which have appeared in these columns, aid of which make Dederick's patent sectional quadrilateral bale bound lengthways, and by Dederick's patent process and machinery, and some even have the check to use Dederick's continuous. Hay Press patent, without which the or cration must stop to the and remove the bale. Dederick suits pending to enforce these patents and will in due time prosecute every purchase for \$10,000 damages, Meantime he carnestly remonstrates against this high handed piracy of his property, and warms the public against being swinded into partnership in a steal for the benefit of thieves and receive an inferior machine, when the same price will purchase a good one of the owner. While Dedrick bore the immense expense of introducing those improvements that are such a benefit to the hay interest of the country, these communists opposed him, and now propose to steal, not only Dederick's patents, but the capital represented by its introduction into use, wond for free copies of patents in proof of this.

DEDERICK & CO., Albany, N. Y.

Ziterary and Domestic.

Washington Gossip.

The national capital is becoming more and more of a winter watering-place. Hundreds come here during the gay season merely to enjoy the festivities, just as they choose to spend July and August at the most fashionable summer resorts. Our winter climate being so much milder than that of the northern cities, tempts many who come here, on their way to Florida, to linger for weeks, or perhaps to give up the southern trip altogether.

The city is now unusually crowded. A very large excursion party of upward of two hundred from New England, who represent some of the most esteemed families of that section has lately been here, and visited Richmond. On the 26th of this month-a fine sunshiny day -two hundred of these visited Mount Vernon On the same day Mrs. Julia Smith Parker, of Glastonbury, Connecticut, who is nearly eighty years old, also visited Washington's tomb, and although the trip is a fatiguing one, started immediately on her return for Philadelphia, arriving there at midnight, and after visiting Lucretia Mott the next day, left for her home in

The entertaiments given here this winter have included as many dinner, lunch, and eveming parties as usual, and even more afternoon entertainments from three to six or four to seven o'clock. But the dinners, of which three or more of the most formal, and therefore wearisome, description occur daily, are worthy of special notice, since at them more of our statesmen meet familiarly than at any of the other assemblages. As many of these banquets include ladies among the guests as exclude them. The gentlemen of the President's cabinet once a fortnight give dinners to each other, at which no ladies are present, and the guests wear frock the expression of her thoughts on the subject. coats. Once every two weeks a "state" dinner is given in the handsome dining-room set apart for such banquets in the Executive Mansion. By-the-way, it is frequently remarked with amazement how marvellous it is that they who planned the President's House should have so understood the needs of a growing nation as to erect a dwelling which has served every purpose for which it was designed for eighty years

Etiquette, which is very rigorous as regards all formal dinner parties, is especially exacting in respect to those given at the White House. An invitation to one of these must not only be answered promptly, but must not be declined for any reason less serious than death, or severe illness in the family, or other calamity occurring to the recipient of the invitation. The cards are issued in this form: "The President and Mrs. Hayes requests the pleasure of Mr. and Mrs. —'s company at dinner on Thursday, January 22, 1880, at seven o'clock."

All this is engraved, save the name and date, which are written on a sheet of large, fine white note-paper, surmounted by the United States coat of arms in gilt. When the guests arrive at the appointed time, they find all the first floor thoroughly lighted, the Marine Band stationed in the first entrance-hall to play during the repast, and the corridors and parlors draped with flags, and adorned with cut flowers and potted plants.

The guests are shown into the Blue Parlor, and each gentleman is given a small envelope containing a diagram of the dinner table, with his own name and that of the lady he is to escort to the table written against the number of the seats they will occupy. The President always accompanies the lady of highest official rank, and gives her a seat on his right. The gentleman of highest rank escorts Mrs. Haves. and sits on her right. For example, at the dinner of the 22d Vice President Wheeler went to dinner with Mrs. Hayes, and the President with Mrs. Evarts. The President always has the central seat on the side of the table, with his back to the north, and his wife sits opposite. From thirty-six to forty plates are laid at these banquets. The table is always lavishly decorated through the centre from end to end with cut flowers and smilax. Bouquets are placed at every plate. A mirror is laid on the surface of the table through the centre, reaching nearly its entire length. In the centre stands Hin watha's boat, wrought in silver, with himself at one end holding a paddle. This handsome ornament, purchased at the Centennial, is filled with flowers. Gilded wires form arches above the horizontal mirror, and are entwined with smilax.

Two customs usual at formal dinner have been abolished at the White House since Mrs. Hayes has been its mistress; one is wine, the other low-necked dresses. She herself uses neither, nor does she approve more of decollette toilettes than of wine-drinking. The inenu for the dinners always includes numerous courses, and from two and a half to three hours are passed at table. Conversation, save with those on either side, is impossible, for the table is very wide. When dinner is over, Mrs. Hayes leads the way to the parlors, and all linger awhile in them, or the conservatories, which are always lighted on all occasions when there are evening entertainments at the White House. Before eleven o'clock all the guests withdraw. Frequently they attend a party afterward. The est evening dresses with high waists ere worn by the ladies, and dress suits by the gentlemen. Members of the cabinet, Justices of the United States Supreme Court, Represenfatives and Senators, and other high officials, accompanied by their wives, or daughters if they are widowers, are usually the guests at ee didners.

Fourteen have been sitting daily around the he table in the family dining-room at the White House, who are the President and Mrs. used extensively. Scholars should be taught to orchards are to be seen all over our county. dies from the same state: ex-Senator Matthew's stead's daughter, and Miss Ferguson. A bright bevy of girls these seven are.

Mrs. Hayes enters with a zest into all the amusements of young people, and although there is no dancing now, as there has not been for many years, at White House parties, she does not disapprove of it. Her daughter Fannie, and Scott, the youngest of the family, regularly attend dancing school.

Although our gay season is now at its height, there are young ladies here who, despite the fact that their social position gives them the opportunity to accept the most tempting invitations for daylight and evening entertainments, yet find time to spend in serious study. A painting and sketching class meets regularly every week at the residence of the widow of the late distinguished scientist Professor Henry, of the Smithsonian Institute. The Misses Henry, Secretary Schurz's eldest daughter, Misses Minnie and Bettie Evarts (daughters of the Secretary of State), a daughter of Mr. John A. King, of New York, and a few others, are members of this class. The ladies are sufficiently advanced in art to assume the direction of their own studies, and no longer have a teacher. Each in turn sits as a model for the others. In addition to practicing sketching while together, a word is given out as a subject to be illustrated by each, according to her own idea of the best manner of conveying its meaning, before the next meeting, at which each is expected to bring a sketch as proof that she has worked out This gives scope to the imagination or the sense of humor, for a clever carricature may express the meaning even better than serious treatment. At one meeting "Coming" was the word selected, at another "Silence."

Miss Lillian, the daughter of Senator Matt Carpenter, regularly devotes her mornings, however late her engagements may have detained her the previous night, to music and the study of Italian and French. She has a fine voice, but her father never permits her to accept an invitation to sing in any public place, even for a charitable purpose. Nor will he, from the same desire not to expose his only daughter to the gaze of a mixed erowd, permit her to appear in tableaux or theatricals for which tickets

A Mississippi Democrat, who was a member of congress before the war, speaks of Senator Bruce as a man of much nobility of nature, who is full of benevolence, and cherishes no resentments. Not long ago he heard that the wife of a man who opposed him in politics in Mississippi, and has criticised Bruce personally very severely, was here in great destitution, and overlooking all her husband had done to thwart him, and the fact the lady herself being from Mississippi was her sole claim to his consideration, he went to the Interior Department and asked a clerkship for her as a personal favor to himself, and finally secured it. He wrote during the senatorial contest in his state to members of his party in the Mississippi legislature, asking them that instead of throwing their votes away, since he realized the impossibility of electing any other than a democratic candidate, they should vote for Walthall, "for then," said Senator Bruce, generously, "my colleague La-

Vice President Wheeler, who says he has heard all of the most gifted women advocates of suffrage for their sex, adds that he considers Miss Susan B. Anthony the ablest of all; that ten speeches, but "Miss Anthony excels in running debate, is never at a loss for a reply, and, so to speak, carries a chip perpetually on her shoulder." She won as friends many of her own sex, who had once opposed the movement she advocates so stoutly, during her recent visit harder than that which now engages you, but to Washington

Governor Fairchild, who has lately been conthe Internal Revenue Bureau of the Treasury Department. So thoroughly is the fact realized that among those employed in government departments in Washington are ladies of the highest birth and culture, whom pecuniary mis fortunes have rendered dependent upon their own exertions for a support, that gentlemen oc cupying the highest social and official positions have chosen wives from their number .- Har per's Bazar.

The Quincy School System.

Col. Parker, the originator of the famous Quincy School System, lectured the other day in New York to the teachers and others. In the course of his remarks he said:

In Boston one little book has been read for whole year. In three months the book is learned by heart, and the idea and not the words cling to the pupil. When a pupil can do the work of the grade above he should be sent into that grade.

Colonel Parker then spoke briefly of the injustice of putting hundreds of thousands of dollars in the high schools, while the primary schools are slighted. The work of the lowest grade, said he, requires more culture and intel- shead people. ligence than are required to teach the pupils in any other grade. [Applause.]

USE OF THE BLACKBOARD. The blackboard, he continued, should be spring, both fruit and forest. Numerous young

Hayes; their eldest son, Webb; their two write well at first. I use script and not printyoungest children, Fannie and Scott; Mrs. An- ing. The child should transcribe to the slate drews, an intimate friend, who is enough like every word on the blackboard from the start. Mrs. Hayes to be her sister; Col. Weir, an aged To do this you must have faith in the child's gentleman, over seventy years old, a cousin of power. No matter if he does not do it well at Mrs. Hayes from West Virginia; Miss Cook, a first. A child will go from script to print in cousin from Ohio; and the following young la- one day-and not know it. I have taught this for eleven years and know that this process is two daughters, two Misses Jones, Murat Hal- of the easiest kind. For firstance, teach your class to read a sentence of script on the board. After school erase the script and substitute print. If you don't call their attention to the change, you will find that they will read it almost instinctively. And right here let me advise you to make a variety in your modes of teaching. If you have been teaching in one way that you think is the best, take another method to-morrow. The new way will be a revelation to some of your dull pupils with whom you have been unable to do anything.

To recur again, a primer is defective as a means of teaching reading because words are not repeated often enough in it. And here, too, the blackboard is indispensable, because the words may be used in all relations. You should all be first-rate writers, particularly those who teach in primary schools. This is the first step in the instruction which I give to

my apprentices.

A teacher knows when a child is ready for promotion. If he or she doesn't know the child's mind the teacher isn't fit to teach. No promotion should be based on a single final examination. Another bad notion that we have is that a boy's position depends on what he has been through. It isn't what a boy has been through, but the thing is what the boy can do-Thus it is that the boy who has lived on a farm goes to the city and quickly reaches the head of the class. Promotion should be for mental power and grasp. This should be the aim of your teaching. We are too much bound by courses and grades, and this bondage ought to be done away with. I think, too, that you all ought to be born teachers. I can read your faces, and I see that you are sticking to an old treadmill. Throw over the treadmill and go ahead.

The so-called Quincy system contains nothing new. It is as old as man, and I feel ashamed sometimes when I am credited with having made any discovery. It is the principle which all the great teachers of the world have used-Aristotle, Plato, Bacon, and all of the others-men who taught the thought.

THE SPEAKER'S EXPERIENCE AT QUINCY. Four years ago the committee placed the centrol of the Quincy schools in my hands. I thought that the school should be made a joyful place. I was against text-teaching, With twenty years behind me I went to work. The great obstacle was the ignorance of the subjects shown by the teachers. Text-teaching does not require an absolutely exhaustive knowledge of the subject. I tried, then, to teach my teachers to learn the minds of those under them. I impressed upon them the necessity of doing well whatever they did. I set the teachers free to work out their own salvation. When I found a teacher who couldn't catch the spirit, I asked her to resign. I made a change, too, in the management of the children. I like a hum in school that is the huni of real work. I do not believe in stiff-backed rules of order. We introduced play into the kindergarten. Blocks and toys were drawn upon, and we tried to make the children happy. I held punishment to be an indication of the teacher's weaknessa strong doctrine you may say, but if children are fed well and treated well, the question of order will take care of itself.

I believe, too, in the right of rebellion on the part of boys who are not fed with sufficient or with suitable work. I object to drudgery, but healthy, earnest, happy work I believe in.

It has been claimed that I stole this system others are excellent in writ- if it can be called such-from Cleveland. stole everything I could. I want you to stealsteal books, particularly Horace Mann's delightful books. Go to work next Monday morning and do something that you have never done before. This work, if well done, may be it carries with it its own reward. As I said this afternoon, we want fifty teachers to stand by the firmed as minister to Spain, married, several right, even if they lose their places. By doing years ago, Miss Bull, who was then a clerk in this we may hope to place the art of teaching where it belongs-among the arts of painting, music and sculpture.

Letter from "Kansas Girl."

Wheat in this section is in fine condition. nuch larger acreage was sown last fall than ever before, and the present prospect gladdens the heart of the weary farmer. Farmers are busy plowing for spring crops, and have been nearly all winter. A soaking rain fell on January 29th, the first rain to speak of since November.

Stock of all kinds is in good condition. Not many cattle are kept and no sheep. This is an excellent county for stock of all kinds, but the people are not able to buy stock, and depend entirely on the wheat crop. It has been asserted that good corn could not be raised here, but it is a great mistake. The same is said of Irish potatoes, which is also untrue. We raised as good potatoes last year by the mulching process as we ever raised in northern Illinois.

Occasionally we hear it said by some chronic grumbler that scarcely anything can be raised in Kansas of as good quality as "back east." To all such we say, go back east, by all means and stay. Kansas wants none but live, go-

Will some one tell us what time to sow turnips to insure a good crop? A great many trees will be set but this

Lastseason being so dry, many lost nearly or quite all their small fruits, set in the spring among them we include ourselves, but we do not feel one bit disheartened, and are preparing to redouble our energies this year.

We hear the statement made from all directions that currents cannot be grown without a windbreak or a wall on the south side of them. We wish to say that in northeastern Kansas we raised them in the open air without shade or any protection, and others did the same.

We can scarcely realize how much our county has improved in the last year. One year ago we had no railroad in it, and now we have two, one through the center of the county and one on the west, bringing a market within the reach

We will say to Delia Crippen that we have no Cooley creamer, but succeeded last summer in having very good butter and cream by putting our milk in two-gallon jars and setting the jars in cold water to the depth of the jar. We have sometimes changed the water a dozen times a day, and succeeded in having morning's milk sweet enough for tea in the hottest day. It auses a great deal of work, but we have always felt fully repaid for our labor when father says: 'How nice and sweet your milk and butter is !"

To all in search of homes in the great west, ve say, Come to McPherson county and to the Gypsum valley. Good land is cheap, cheaper, heapest here on account of the mortgages coming due. To all we say, Come.

Roxbury, McPherson Co., Kansas.

The labor of changing the water about her milk jars so often, cannot be other than very exacting on our fair correspondent. In place of setting in a box of water, when the hot summer comes on, if "Kansas Girl" is still without a cool dairy room, let her fit a cover over the top of her milk jars, with a half-inch open space between the top of the jar and the cover similar in principle to the cover of the Cooley creamer. When the milk is strained into the jars, place the covers on and roll the jar in several folds of thick, woolen blanket, enveloping completely the top and sides of the jar. Keep the blanket well saturated by pouring cold water over it, not allowing the wrapping to dry The evaporation will keep the contents cooler and of a more uniform temperature than setting in water, and the labor will be much less. Select the coolest place and least exposed to the sun that you have at command. The evaporation from the milk jar will prevent the absorption of foul odors, by the milk, that may be floating around. Try this plan and report results through the FARMER.

Household Helps.

Extracts from the Rural New-Yorker: I will say to my house-keeping sisters, who now the labor of beating eggs for pound cake that the cake will be just as nice if they are not beaten at all. If you will cream the butter and sugar together until smooth, then stir in first a handful of the flour, next two eggs, another handful of the flour, two more eggs and so on until you have it all mixed; add the flavoring. stir a few minutes and it is ready for the oven.

I could not be induced to try the above receipe for some time after I heard of it, but since I have tried it I do not make cake in any other way. I think if my sisters will try it they will like it as well as I do.

Lawns and calicoes should always be washed in cold water, if you wish to preserve their colors. Warm or hot water either will fade them. Never use the kind of soap that is put up in bars or papers, by certain dealers, to whiten or make cloths clean without boiling. To wash calicoes, etc., with common turpentine or country-made soap, will brighten the colors. All such goods should be ironed on the wrong

A plaster made of soft soap and gum camphor will scatter swellings, boils, etc., just as well, if not better, than iodine, and is sometimes easier to obtain, especially in the country. OLD HATS.

Did you ever find old hats a nuisance? Shall I tell you what to do with them? Old straw hats may as well be burned, though sometimes the brims may be sowed together for kettle mats, saving your table many a black mark. But wool or fur hats may be serviceable. A fine soft felt, binding worn rather rusty, and altogether shabby, was served this way : Binding ripped off, thoroughly scrubbed with hot, clean suds; then a dye of extract of logwood and blue vitriol took the rusty look away, and left it black as new. Some gros grain ribbon neatly stitched on for binding and band, and the hat was given a new lease of life, as best,

I found an old Scotch cap the other day. I plunged that into suds, then dyed it, and with a bit of silk vest-binding, a fore piece of new enameled leather, made the cap do nicely for a school cap for George. Now, little mothers, econemically inclined, try soap-suds and dye on old hats and rid the house of a nuisance. Old water-proof cloaks were made over for

our school girls' balmorals, by putting in black dye and putting on ruffle of new waterproof with red flannel pinked, and trimmed with plain bias band above. One-half yard red flannel brightened two balmorals, and the girls are quite proud of them. As the cloaks were very rusty and outgrown, they were much more serviceable as balmorals, and will be durable. May these hints help some worker like myself.

SAUCE FOR VELVET PUDDING .- The yelks of two eggs, one cup of white sugar, one tablespoonful of butter. Beat the eggs well and all the other ingredients, and add one cup of boiling milk. Then place it over the fire and let it come to a boiling heat. Flavor with vanilla.

Advertisements.

In answering an advertisement found in these columns, our readers will confer on us a favor by stating that they saw the advertisement in the

\$66 a week in your own town. Terms and \$5 out it free. Address H. HALLETT & Co., Portland, M.

\$77a Month and expenses guaranteed to Agt

\$777 a Year and expenses to agents. Outfit free. Address F. O. VICKERY, Augusta, Maine.

\$72 A WEEK. \$12 a day at home easily made Costly outfit free. True & Co., Augusta, Me. 62 Gold, crystal, lace, perfumed & chromo cards,

\$5 to \$20 per day at home. Samples worth \$5 free. Stinson & Co., Portland, Me

\$55.66 Agents Profit per Week. Will Fig. 6. St. G. RIDEOUT & CO., 218 FultonSt. N.Y

5000 Bushels seed potatoes. Orders booked now kinds, both sweet ahd Irish. Directions for making FIRE HOT BEDS in free catalogue. E. TAYLOR; Armstrong, Kas.

AGENTS! READ THIS!!

We will pay agents a salary of \$106. a month and expenses, or allow a large commission, to sell our new and wenderful inventions. We mean what the say, Sample Free. Address Sherman & Co..., Marshall, Mich.

A GENTA WANTED. We wante reliable Agent in A every town in Indiana, Illinois, Iowa and Kansas to sell our Medicines. No Capital Required; but we do require good recommendations. Agents can make fifty to one hundred dollars a month, with a little work at home. For further particulars, address BEOOKS & CQ., 159 Chambers St., New York City. P. O. Box, 2567.

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OUR \$15 SHOT-GUN at greatly reduced price. Send stamp for our New Illustrated Catalogue. Main Street, CINCINNATI, O.





THE VICTORY CORN MILL The Victory Corn Mill will

grind corn meal coarse or fine, shelled or on the cob. Belf shar ening Plates. Made entirely of IMON AND STREEL VEST STORD, durable, and warrented in every re-ispect. Capacity, 10 to 29 bushels per hour. Send for

address THOS, ROBERTS, SPRINGFIELD, O.

Fire-Proof Safe For Sale

We have a large new fire-proof safe for sale, of Mosler, Bahman & Go's Manutacture. Outside measurement 5 feet high, and 2 ft 8 in by 2 ft 10 in wide. Inside dimensions, 3 ft 4 in by 21 inches. This safe is new, never having been in use, and cost at factory \$336 00; it is first class in every respect. Having no use for it, we will sell at a bargain. Address KANSAS FARMER, Topeka, Kas.

Publication Notice.

You, Joseph Lathrop, Jr., Mary D. Lathrop, Abbey P. Lathrop, Lillie D. Whitelaw. Carrie D., Smith, Sarah G. Mack and Wm. A. H. Lathrop, helis at law of the estate of Jos. Lathrop deceased, all non-residents of the state of Kansas are hereby notified that you have been sued in the District Court in the County of Shawnee and state of Kansas by Lucy R. Rix, and that unless you answer the petition filled against you on or before the 18th day of February, 1880, the said petition will be taken as true, and judgment rendered, quieting the title of the said Lucy &. Rix to the following premises, viz.: the north half E. Rix to the following premises, viz.: the north half of the north west quarter of section number thirty four (3), in township number thirteen (13) of range seventeen (17), situate, lying and being in the county of Shawnee and state of Kansas, and forever enjoining you and each of you from claiming or asserting any title, estate or interest in or to said premises or any part thereof, and for costs of said action.

A. I. WILLIAMS, Att'y for Plaintiff.

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AT DATE OF PURCHASE. For Further Information Address

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Fort Scott, Kansas LAND COMMI TOPEKA

THE STRAY LIST.

HOW TO POST A STRAY

FY AN ACT of the Legislature, approved Feb 27, 1866, section 1, when the appraised value of a stray or strays exceeds ten dollars, the capital stray of strays exceeds ten dollars, the capital strays in the day of the strays after receiving a certified description of said strays, the day on which they were taken up, their praised value, and the name and residence of the taker up, the Kannan than the sum of fifty cents, said animal contained in said notice."

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

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

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

a stray.

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

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

stray.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit sating that such as two was taken up on his premises, that he did not drive mor cause it to be driven there, that he has saverised it for ten days, that the marks and brands have not been altered, also he shall give a full secreption of the same and list cash value. He shall also give a bond to the state of double the value of such stray.

ue. He shall also give a bond to the state or tourse the rank of such stray.

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

If such stray shall be valued at more than ten dollars, i shall be advertised in the Karsas Farrier in three successive pumbers.

The owner of say, stray, may within twelve models from

half the stray simile of values at more than ten dollars, in the successive number disease in the Kassas Farmer in three successive number disease, number of any stray, may within twelve monitie, from the time of isking up, prove the same by evidence is they any Ju tice of the Peace of the county, having for its light of the line when, and the Justice betwee whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of I charges and cests.

At the end of a year after a stray is taken up, the Justice of the Peace shall leave a summons to the householder to appear and appraise such stray, summons to be served by the takes up; said appraiser, or two of them shall in all respects of the claim of the dustice, of the came to the Justice, or the came to the dustice.

It is all the cost of keeping, and the benefits the takerum may have had, and report the same on their appraisement.

their appraisement.

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

Any person who shall sell or dispose of a situa, or, lake the same out of the state before the title shall have vested in him shall be guity a misstemeanor and shall forfeit double the value of such and and such as and be subject to a fine of twenty dollars.

Strays for the week ending February 18.

Bourbon County-L. B. Welch, Clerk.

COW-Taken up by George Moneil, Osage to, one white ow with red specks on her sides, 10 or 11 years old, no mark ir brand perceivable, valued at \$10.

HEIFER—Also, by the same, one red and white spotted selfer one year old last spring, valued at \$10.

Cowley County—M. G. Troup, Clerk.

STEER—Taken up by John D Parks, January 10, 1850, (P Lazette,) one two year old red and white spotted steer, no aarks or brands visible, valued at \$15.

Greenwood County—W. S. Reese, Clerk.

Greenwood County-W. S. Reece, Clerk. Greenwood County—W. S. Reece, Clerk.

MARE—Taken up by Levi Friebarger, Janesville tp, one bay mare 2 years old, 14 hands high, blind in left eye, no marks or brands.

MARE—Taken up by L Friebarger, Janesville tp, one dun mare, 6 years old, 14% hands high, black mane and tail, star in forehead, no marks or brands.

PONY—Taken up by L Friebarger, Janesville tp, one black pony filey, 2 years old, 18 hands high, star is forehead no marks or brands.

District of the control of the cont

Harper county-H. O. Meigs, clerk. BULL—Taken up by W A McFarland, Reulla tp. Dec 12 1879, one roan bull, 6 years old, no marks or brands, drooping horns, valued at \$18.

Linn county—J. H. Martin, clerk.

OW.—Taken up by Michael Day, Sheridan up, Dec 4, 1879

Education of the County—Joshus Michael 1915.

Nemaha County—Joshus Michaell, Olerk.

HIFFR—Taken up by Fred Schumaker, Granada up, C2, 1879, one red heifer one year old past, some whitespots used at \$13.

Reno County-W. R. Marshall, Clerk. STERR—Taken up by Wm F Jones, Soda tp., Jan 22, 1880, one 5 year oil yellow and white spotted steer, horns sawed of, S on right hip, valued at \$15.

STERR—Also, by the same, one four year old pale red steepfright horn drooped, valued at \$10.

Bush county.—F. E. Garner, clerk

ARE—Taken up by K. M. Peterson, Banner tp, July 17,
one sorrel mare about 5 years old, with one white hind
and some white in fore-head, no brands, valued at \$50.

Shawnce county—J. Lee Knight, clerk.

FILLEY—Taken up on or about Jan 24, 1880, by Ellas

FILLEY—Taken up on or about Jan 24, 1880, by Ellas

flowers, small size, since on front feet, had on a head halter, no

minute of the county of the same, one small black filley, one

year old past, right but same, one small black filley, one

year old past, right but one will be start in forehead, bad

on a head halter, no other marks or brands percelvable and

valued at 181.

Strays for the week ending February 11.
Anderson County—Thos. W. Fester, Clerk.
COW—Taken up by John R Foster, Jackson up, one dark
d and brown sow, bob tall, about 7 years old
STEER—Taken up by Wm. V. Pingre, Walker up, one dark red one year old last spring steer, rather small size, square crop of of right ear and swallow fork in the same, and under bit in left ear.

and under bit in left ear.

Bourbon County—L. B. Welch, Clerk,

MARE—Taken up by L.P. Grey, Scott tp, one gray mare
with black legs nearly up to the knees, no marks or brands
percelvable, valued at \$40.

HEIFER—Taken up by Michael Deveraux, Freedom tp,
one yearling heifer, brindle, with two white spots on back,
white belly, white spot in forehead, scrub horns, and valued
at \$10.

white belly, white spot in forehead, scrub horns, and valued at \$10.

STEER—Also, by the same, one yearling steer, red, with white belly and end of tall white, valued at \$10.

STEER—Taken up by James Deeds, Franklin tp, one white 2 year old steer, heavy bull; with red on his ears and a letter on right hip, either a B or E, eannet tell which, no other marks or brands, valued at \$20.

COW—Taken up by H S Dalton, Scott tp, one white cow, marked with crop off the right ear, supposed to be 3 years old, no other marks or brands perceiveable, valued at \$14.

STEER—Taken up by A M Kirkpatrick, Franklin tp, one yearling steer, pale red with white face and white in his flanks, valued at \$10.

STEER—Taken up by C H Johnson, Franklin tp, one yearling steer, red with some white spots, no mark or brand perceivable, valued at \$15.

Brown County—John E. Moon, Clerk, STEER—Taken up by L. P. Cowan, Morrill tp. (Morrill P. O.) Dec 25, 1879, one while steer, supposed to be one year old past, no marks or brands.

past, no marks or brands.

Elk County.—Geo. Thompson, Clerk.

MARE—Taken up by L P Scates, Union Center tp, Dec 27, 1879, one fron grey mare about 12 hands high, saddle marks on back, branded on right shoulder and on left hip, but cannot tell what the brand is, valued at \$10.

COW—Taken up by Samuel Cook, Longten tp, January 12, 1880, one light red cow, left horn drooped and broken off about half way up, the other horn standing up, a dim brand of O or C on right hip, valued at \$14.

split in right ear.

Lyon County—Wm. F. Ewing. Clerk,

HSIFER—Token up by D. W Plumt, Jackson to ove yearling heifer, stag horns, brockle face, white spot on rump
bush of fail white, valued at \$12.

HEIFER—Taken up by E. E. Watteins, Elmendaro tp., Jan
1, 1890, one yearling heifer, color red and white, no marks or
brands, valued at \$11.

HEIFER—Taken up by H. G. Phelps, Waterloo tp. Feb 2.
1880, one yearling heifer, red and white, medium size, no
marks or brands, valued at \$15.

MARE—Taken up by P. M. McCormick, Center tp., Jan 17,
1880, one bright bay mare, 6 or 7 years old, star in forehead,
about 15 hands high, light main and tall, valued at \$40.

BileyCounty—F. A. Schermerhorn, Clerk,
HEIFER—Taken up by John Chapman, one yearling.

BileyCounty—F. A. Schermerhorn, Userk.

HIFER—Taken up by John Chapman, one yearling, heifer, color red and white, no other marksor brands.

Shawnee County—J. Lee Knight, Clerk

HEIFER—Taken up Nov 7, 1879, by Harvey D Rice, Tecumsch tp, one white heifer one year old, slit in left car, valued at \$11.

STEER—Also, by the same, Nov 15, 1879, one yearling steer, red and white, no visible brand, valued at \$15.

Summer County—S. B. Donglass, Clerk.
MARE—Taken up by T. W. Rogers, Green tp, Nov 14, 1879, one light bay mane, 14 hands high, black mane and tall, so marks or brands, valued at \$40, Wabaunsee County T. N. Watts, Clerk.
COLIT—Taken up by Wagner Bro's, Maple Hill tp, one pony colt, one year old past, color bay, with black joints, ne
marks or brands, valeed at \$15.

\$20 REWARD.

I will pay the above reward for any information leading to the recovery of the following horses; A dark sorrel brood mare 9 years old with short mane and tail, with no marks except a small white spot in the forehead, her weight, I think, is about 1300 lbs. Also her colt, a large norse colt of about the same color of the mare, having a small white spot also in the forehead, he is 6 months old. At the same time a roan colored horse colt of fair size, 2½ years old. These strayed of were stolen from my place, 2 miles south-eads of autum 7, 0, shawnee Co., the last of Soptember, I will juy the above for information of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportionate price for one of two of the tirree, or a proportional price of the tirree of th

Chimney Flues. STRAYED. A large, fat, white milch gow, with red nose, ears and three red feat, Please deliver or leave word at T. B. Thompson's: No. 88, 10th Ave., Topeka.

BSTRAY.

Strayed from the spheriber at miles west of Carbondals. Ranges, about Sept. 22th, "Source of Carbondals. Ranges, about Sept. 22th, "Source Market Market medium size, white stripe in face, has been sweened in right shoulder, face varied of information that will lead to the recovery of the Mare.

MARTIN HEISEL,
Carbondale, Kansas.

S10 REWARD STRAYED OR STOLEN.

From the prairie east of Long creek, 614 miles east of Burlington Coffey county, Kansas, 14st April, one bright bay filley, three years old in June. No white hairs, marks or brands. BOICE, BRO. & CO. BOX 255; Burlington.

Sweet **Potatoes**

For Seed.

Plants in their Season. N. H. Pixley, Wamego, Kansas, has about 1000 bushels of Sweet Potatoes, including 5 varieties of

Nansemend, Brazillian. Southern Queen and Peabody.

New Seedlings. Sold at low rates and in quantities to suit. Will ship to any point. Address N. H. PIX-LEY, Warnego, Kas. Will be ready by the middle of May.

THE CHEESE FACTORY

at Spring Hill, Johnson Co., Kas., will be for sale or rent for the next six weeks. This tactory has been in successful operation for the last five years, and is well supplied with water and the most approved apparatus, and has a capacity for 250 cows For further information address the understand at Boring Hill.

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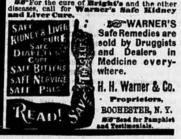
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Ayer's Hair Vigor

TO ITS NATURAL VITALITY AND COLOR,



ness, care, disappoint-ment, and hereditary pre-disposition, all turn the hair gray, and either of them incline it to shed

AYER'S HIR VIGOR, by

has proven that it stops the falling of the hair im mediately; often renews the growth; and always surely restores its color, when faded or gray. It stimulates the nutritive the hair and its beauty, Thus brashy, weak or sickly hair becomes gloesy; pilable and strengthened; lost hair regrows with lively expression; falling hair is checked and established, thick hair thickens, and faded or gray hair resume their original color; its operation is sure and harmless. It cure dandrant, heals all humors, and keeps the scalp cool, clean and soft—under which condition, diseases of the scalp are impossible.

EAS & dressing for ladies' hair, the Vigor is praised or its grateful and agreeable perfumes, and valued or the soft lustre and richness of tone it imparts.

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THE COOLEY CREAMER.

Farmers and butter makers of Kansas, we wish to call your attention to the great success of the Cooley Creamer—the submerged process of setting milk for raising cream—as evidenced by the large sales of the past 12 months, the hundreds of letters written in praise of it, the universal approval of it by the agricultural press of this country, the fact that at the London International Dairy Fair, and at the State and Country Fairs all over this country. Cooley Creamer butter and the process itself has atways taken first premium.

Extracts taken from letters received from parties using the Creamer:
"Proves to be a decided success."—"It is worth ten times its cost."—"The saving of labor is fully 50 per cent."—"Would not do without it if I had but one cow."—"Am getting from 5 to 8 cents a pound more than those making by the old process."—"I placed it in a small battened leanto attached to my barn, where it has worked equally well in the coldest as well as in the mildest weather."—"But the advantages are no more for summer than for winter use: have used it all winter in a room without fire."—"III had but two cows I should use one, knowing that I can make a better quality of butter and more of it, with much less labor."

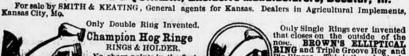
To the many that have signified to us their intention of getting one next spring, we say, purchase note and get the benefit of it during the winter while butter is high, it is equally as valuable for winter as for summer use. We want good sgenis in every county not taken. For a copy of Chicago Dairyman giving prices and information send to LYMAN & SHAFFER, STATE AGENTS, 100 Kansas Avenue, Topeka.

Barnes' Wire Check Rower.

The Only Entirely Successful Wire Check Rower Ever Invented.

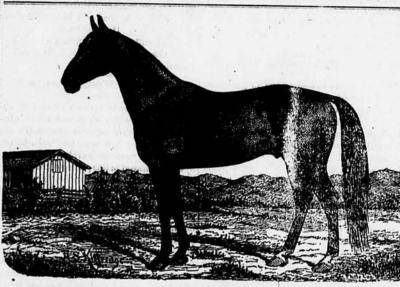


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This rowder make "Clit-Edge" Patrey the year remoneyene and the Science of Chemistry applied to Butter-making. July, August and Winter Eutter made equal to the best June product. Increases product 6 per cent. Improves quality at least 20 per cent. Reduces labor of churning one-haif. Prevents Butter becoming rancid. Improves market value 3 to 5 cents a pound. Guaranteed free from all injuries: ingredients. Gives a nice Golden Color the year round. 25 cents, worth will produce \$2.00 in increase of product and market value. (an you make a better investment? Beware of imitations. Genuine sold only in boxes with trade-mark of dairy-maid, together with words "GILT-EDGE BUTTER MAKER" printed on each package. Powder seld by Grocer: and General Store-keepers. Ask your dealer for our book "Hints to Butter-Makers," or send stamp to us for it. Small size, 16 lb., at 25 cents; Large size, 236 lbs., \$1.00. Great saving by buying the larger size. Address, BUTTER IMPROVEMENT CO., Prop'rs,

WATCHES! CLOCKS! JEWELRY!

SILVER--PLATED WARE!!

** Aarge stock and Low Prices at JAMES DOUGLASS' 205 Kansas Ave., Topeka, Kas.

NEW CASH SADDLE AND HARNESS MANUFACTORY AT

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H. D. CLARK, Manufacturer of Leather, Saddles, Harness, &c.. aad Dealer in Leather,

WHIPS,

Shoe Findings, etc., Wholesale and Retail. FOR CASH ONLY

Cash paid for hides, tallow, sheep pelts and furs.

56

Communications.

Farmers Clubs.-Preparing Wood, Etc.

The weather has been very fine and warm, and considerable plowing has been done. A here.

Our farmers' club held its monthly meeting the 24th of January at the home of the presienjoyable day, and papers on interesting topics were read. We are to have a lecture and some essays at our next meeting, and we are to have think these clubs are really of benefit to the farmers; they generate new ideas and keep up a friendly feeling in the community.

There is one thing I notice in which a great many of our Kansas farmers are deficient or negligent, and that is in the provision of firewood. At too many farms during the summer months all that will be seen in the shape of firewood is a chopping block and a few sticks and chips, and I think that in most of these places the head of the family might as well have had a supply sufficient for six months as not, and I am confident if they will make ready their summer's supply of firewood during the winter months when their work is not pressing, they will find it a saving in time, comfort and temper. The way I put it up is this: I lay up the four successfully, or can they be grafted? sides about 14 feet long and 31 feet high, and fill the center up about three feet higher than the sides, then for the outside layers I use split wood laying it on as you would bundles in topping out a round stack when finished. The pile is from ten to twelve feet high in the center and the stock. Make your upper valve tight, it evwill shed all the rain, keeping the wood sound idently has a leak in it or the water could not and dry. I prepare a smaller pile to last until escape. We presume your pump is a log pump July or August, so as not to commence using on and your main valve or bucket may need the main pile until that time. In this way we new piece of leather on the drop. Use the keep a supply of dry wood. We have put very best sole leather, hammered firm. Wrap. wood up in this manner ever since I can re- the bucket with yarn and saturate the yarn JAS. J. DAVIS. Everett, Kansas.

Need of Oil Mills-Penning Sheep, etc.

Stock of all kinds healthy and in good condition. Wheat so far looks well. Farmers made good use of the warm January by plowing for flax. A great many old pastures are being plowed up for flax. The acreage of flax will be much larger than last year. The great amount that will be raised this year, calls loudly for an oil mill at the splendid water power at Lawrence now going to waste. We believe I have noticed that during the "grasshopper no place in the state could furnish greater inducements for an oil mill. Douglas county would furnish enough flax seed to keep a mill going most of the time. But Johnson county raises largely of flax, and would deliver most of its crop to an oil mill in Lawrence. Kansas must manufacture her raw material and quit paying freight both ways on the raw, and then on the manufactured article. We also pay freight on our grain, beef and pork to feed the men and their families that manufacture our goods. Let our papers work this manufacturing business up, and let us all put our shoulder to the wheel and push. We ought to have all our woollen goods, our starch, our leather tanned and made into boots, and scores of other things manufactured at home. When we do all this, Kansas will have better markets, and will be the most presperous state in the union.

I have never raised flax, but expect to sow 40 or 50 acres, and would thank some successful flax grower to give the FARMER an article on how to do it. The amount of seed per acre, when to sow, and the best way to get it in the ground, and the proper way to harvest and thresh. Oats have not paid for some years, either in yield or price. Hence the desire to panel demands it, and battens to be on the try something else.

Your dog show was a good one. Now give us one on the wolves. They are worse on my sheep than the dogs. My sheep never looked better. They are now dropping their lambs. So far have not lost a lamb. I am going to be short of pasture unless I put them in my pasture near a mile from the house, which I don't like to do on account of wolves and the dogs, What can I soil them on the cheapest, or would it be better to sow a few acres of oats for pas-N. H.

Harper, Kas.

Oats will make an early and rapid growth, and the land could be seeded to wheat in the fall. The sheep droppings would improve the wheat crop. If you have to pasture your sheep a mile from the house, keep a boy with a shepherd dog always with them. Build a tight picket pen, pickets six or eight feet high, on or near the top of a roll in the prairie in which to pen the sheep every night. Place a trough in the pen under cover from rain, which keep well supplied with fresh, hard wood ashes and salt, mixed in equal proportions. After penning a few evenings the sheep will go to their lodging place without trouble. Fasten the sheep in securely at night, and for the benefit of wolves and tramp dogs, suspend bits of lean meat by cords on the outside of the sheep pen, and in each piece of meat put one grain of strychnine. Put up the bates out of reach of outside well such as the class that have plenty of pluck and perseverance, we are far from being discouraged, and intend to make a bold effort this year.

We are trying to work up an interest in broom corn, Egyptian rice corn and sorghum planting this spring, and I would like to intend your readers which is the best kind to plant—the Standard, Evergreen, or Dwarf, and which is the best kind of sugar cane, and where can seeds be obtained? By answering the above you will confer a favor upon many of us. and in each piece of meat put one grain of strychnine. Put up the bates out of reach of animals in the morning before letting the sheep out. Before the summer is half over all the wolves and tramp dogs in the neighborhood will be quiet enough. It always pays to pen sheep at night, and to keep an eye on them had fright by dogs injures the above you will come. There was more wheat sown in this county last fall than ever before, but the prospect, at this writing, is anything but flattering. Stock of all kinds is doing well.

Keep up the correspondence, brother farmers, and let us work in unity until our interest is represented fully in county, state and nation.

C. A. Curtis. sheep so much that they sometimes never wholly recover from it, even though they are not hurt. An animal's natural enemy has a paralyzing influence on it, which our philoso phy is not wholly able to fathom.

The Pump Won't Work.

As is customary when a man is in trouble he calls on his friends for help, and especially is this the case with the "Patrons of the FARM-ER."

My first trouble lies in a pump which I am few farmers have sowed spring wheat, but I be- now using in a well 26 feet deep, but which lieve that spring wheat does not do very well was formerly used in a 37 foot well, and which was perfection in my eye, but now, in the shallower well, is a failure. I have experimented and tried all the principles of philosophy famildent of the club, Mr. Shannon. We spent an iar to me, but so far, without success. The depth of water ranges from 10 to 20 feet during the year. I have a valve at the first joint about eight feet from the bottom, another valve 11 a free seed distribution in the near future. I feet from the discharge spout at the bottom of the galvanized iron chamber in which the upper valve (or sucker) works. These valves are all new and to the best of my judgment, perfect. But the water will run back in half an hour, hence I must prime it almost as often as I want to use it. By taking off the upper joint and watching, I find that the water gradually runs back under the valve at the bottom of the chamber, although fitted neatly on to the top of the new joint. Now, I would like to know what is the trouble with the pump and how to remedy it.

Again, I have several bundred seedling peach trees (last year's growth) which I would like to set out this spring, but don't want mongrel fruit. Can they be budded in the spring

H. D. HACKNEY. Walton, Kas.

Take the bottom valve out. It probably obstructs the water, preventing it from rising in with hot tallow. Drop the bucket in the pump stock and settle it in place with a few taps of a pole. Charge the pump and it will work if all is tight.

"Trees for Western Prairies."

I notice an article in the last FARMER, with he above caption, in which the writer mentions the Lombardy poplar as a tree well suited for the prairies. Whatever may be its adaptability for other regions, it evidently is surpassed by the cottonwood in this portion of this country. year" of 1874, but very few Lombardy poplars survived the ravages of the locusts, whilst the cottonwood stood the test. Both were stripped of their foliage, but the cottonwood had the power of endurance while the Lombardy had not. I am growing a few of these doomed trees, but they do not make the growth that cottonwood does, nor do they appear so thrifty; in fact they nearly all died, with me, last season.

As we have no time to waste on variety of trees that have not been tested in this climate, it would be well for those who have made a success of them in southwestern Kansas, to speak out, and let the readers of the FARMER know it. No farmer can afford to tinker round for five years to make a wind-break or fence of Lombardy poplar and then at last fail, when he can make a sure thing of the cottonwood.

J. B. SCHLECHTER. Sterling, Kansas.

Plan for Portable Fence.

Panels of any length and heighth, the boards fastened with bolts or wrought nails to battens at either end, and in the middle, if length of same side. Cross sills proportioned to height of fence, and kept from slipping by stakes driven at either end. A gain sufficiently wide to receive the ends of two panels lapped, to be cut in the upper edge of sill, one side perpendicular, the other slanting toward that end of the sill. A wooden "key," square at the side next the fence, and dove-tailed on the other to match the diagonal side of the gain. Set the ends of two panels in the gain, the battens on the outside, drive in the key, and the fence is set up. A clamp at the top, of similar construction to sill, may be necessary in this windy country. Sills may be economically cut out of stuff 21x12 inches, if pattern is reversed at each cut.

SIDNEY, Ness Co., Jan. 30.—We are in a new county, and as last season was very dry with us and our crops mostly on the sod, we, in consequence, did not succeed in raising much, and at the present time are passing through a season of severity, some of our brother farmers feeling it keenly. But as we have one of the picest laying counties in the state, and as our citizens are of the class that have plenty of pluck and

We refer our correspondent to the advertising columns of the FARMER for all kinds of seeds.

Uniontown, Bourbon Co., Feb. 2.-We are

having an old fashioned Kansas winter, warm and pleasant, and of course all kinds of stock are doing well. This warm, dry weather is very favorable to feeders, and parties who are feeding steers are wearing smiling faces, and well teeding steers are wearing/smiling faces, and well they can afford to. Corn at 20 cents leaves a good profit fed to steers that are now worth \$3.50 to \$4, and hogs \$3.50 to \$3.60. If small farmers who raise but a few steers, would learn that the proper way for them was to feed them instead of selling the steers and corn to some regular feeder, I think they would get at least twice as much for their corn. I have never yet fed any corn to steers that did not bring me 40 cents per bushel, besides what the hogs got. cents per bushel, besides what the hogs got, which is often as much more added to the profit.

I have been wondering, of late, if that man that one of your correspondents wrote of as having two hogs picketed by the foot, on the open prairie, has got them fat. In my opinion he had better have sold his corn at 15 cents and bought better. he had better have sold his corn at 15 cents and bought his pork at \$5 per hundred. In fact, is there any profit in hogs to the average farmer, especially if he has to keep them on dry freed all the time? Of course they are profitable to those who are provided with clover pasture, and who also have the faculty of making them grow. As far as my observation goes, I think that not more than one person in six gets anything more than the market price for their corn fed to hogs, and many do not get that. A man fed to hogs, and many do not get that. A man who does not make his hogs make one pound per day up to six and nine months old. does not manage them properly, or his stock is not good, and he had better not keep more than enough for his own use.

Many thanks to Mr. Stoner for his feed-pen.

Now for that cheap roofing.

Our friend has had a description of the cheap roof. What does he think of it? No farmer in Kansas who reads the Kansas FARMER, will have any valid excuse, since the descriptions of Mr. Stoner's manger and stock shelter and Mr. Alexander's hay roof have been published, for allowing an animal on the placefrom a horse to a chicken-to remain without shelter through the winter.

WASHINGTON, Lincoln Co.—It has rained to-day for the first time in the last two months, which is a good thing for the wheat, as it was needing it badly. A good many pieces of the Odessa variety that was sown broadcast, is injured a good deal already. I notice the wheat that was drilled in has stood the dry, freezing weather, and looks a great deal better than the same kind of wheat sown broadcast, which is same kind of wheat sown broadcast, which is good evidence to me that drilling is the best and

same kind of wheat good evidence to me that drilling is the best and safest mode to put in wheat.

The corn is about all in the crib, and the largest part of the crop has already gone to market, also the bulk of the hogs.

Prices of grain has dropped considerably of late. Wheat is worth 50c to 80c; corn, 18c; rye, 60c; potatoes, 60e; butter, 15c; eggs, 10c; hogs, \$3.50 to \$3.60.

Cattle doing well; no disease among them.

Where can I get some Light Brahma chickens?

See advertising columns of FARMER.

CLAY CENTRE, Clay Co., Jan. 27 .- I do think the Lord has blessed his people in our county, (and state) with the abundance of crops that has been raised, and the fair prices that the farmers have received for their grain and produce have nearly all been enabled to make some improvements, and some very valuable im-provements. Corn is all gathered, and the farmers are all trying who will be the furtherest along with spring work; a goodly number have their stalk fields cut, or broken down and raked and burnt, and many are plowing. A large acreage of wheat has been sown, and is looking very well; but is beginning to need rain or very well; but is beginning to need rain or snow. Fall wheat is the most profitable small grain raised in our county. The price from July till the present has ranged from 75 cents to \$1.08 per bushel; corn from 20 to 25 cents; hogs from \$3 to \$4.50; the regular price about \$3.50 gross; beef, \$2.50 gross. Fruit is all unharmed from the frost. Stock is looking well, and all kinds are healthy, and never was as free from disease. Immigration is still pouring in and Clay Centre is still improving.

I wish that every farmer in the state of Kansas took the Kansas Farmer, for any farmer that will read it will find something that will benefit him twice what it costs to take the paper.

W. J. Woodside.

Advectisements.



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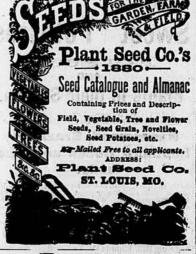
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Acknowledged by all farmers who have used it to be THE BEST AND ONLY PERFECTLY SUCCESS. FUL Wire sheek Rower. Will plant five acres more a day than any other, as the Wire. Is NOT RELIOUED FROM THE MACHINE in planting the entire field. Eleven years use has demonstrated the fact that the ONLY SUCCESS FUL WAY to use a rope or wire line is for the machine to transfer it find position to plant the next row. In not buy it Wire Cleek Rover unless the line crosses the machine, as it will last twice as long as a wire run on one side, which must be dragged that position regardless of obstructions met as the planter crosses the field, and which cause friction, inaccurate checking and breaking of the wire. In our check rower the clasticity of the wire and its large curve in passing over the machine, prevents a particle of bending or displacement in the wire, such as occurs in Check Rowers where the line is dragged into the pulley at an angle and high tension, and both bent and displaced as it enters the pulley. Dragging the line into position also causes canting, or opping of the planter, by which one row is planted too deep and the other too shallow.

Our Rope Citick Rowers age too well and favorably known to call for any extended notice.

For full description of our Wire Check Rower and the three styles of Rope Check Rowers which we manufacture, write for a circular.

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Red Clover, White Clover, Alfalfa Clover, Alsike Clover, Timothy, Blue Grass, Red Top, Orchard Grass, German Millet, Common Millet, PearlMillet, Hungarian, Black Oats, White Oats, Red Rust Proof Oats, Odessa Wheat, On-ion Sets, Onion Seeds, Peach Pits, Black Wal-nuts, Osage, Honey Locust, White Corn, Yellow Corn, Egyptian Rice Corn, California Ever-green Broom Carn, Early Amber Sugar Cane. green Broom Corn, Early Amber Sugar Cane, Navy Beans, Medium Beans, Castor Beans, Flax Seed, Artichokes, Northern Rose, Peach Blows, Peerless, Snowflake and Brownell Beauty Pota-

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25 cts per lb, postage paid. Less rate on 5 er more pounds, sent by express. Special rates on one to five bushel orders. Do not grow common sorghum, when you can get a superior syrup from the Ambercane at a small cost for seed. S. H. Downs, Topeka, Kas.

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Browne'and Canton Sulky Plows, Stalk Cutters, Harrows, Drills, Cultivators, Climax Mowers and Reapers. Call and see the Rockford Combined Drill and Planter, Iron Turbine and Stover Wind Mill.

SEEDS.- All kinds of Field, Garden and Flower Seeds. Fresh and true to va-

KANSAS IRON FENCE .-- Cheaper than board fence. Call and see it. S. H. DOWNS, Opposite Shawnee Mills, Topeka,



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TERMS \$2 PER ANNUM.

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KANSAS TO THE FRONT!

The Leading Wheat State in the Union in 1878, and the Fourth Corn State—The Creat Kansas Harvest of 1878 was Solid for the The celebrated Grain Belt of country, in the lime-stone section of Central Kansas, eraversed by the Kansas Pacific.
The-following statements are taken from the report of the Kansas state Board of Agriculture for 1878:

WHEAT! Kansas rises from the Eleventh First WHEAT STATE in the Union in 1878, producing 26,518,958 bushels winter wheat, and 5,796, 403 bushels spring weast; total. 32,315,361

Bushels Wheat, with only one-eighth of the state under cultivation. The organized counties lying in the Golden Wheat Belt of the Kansas Pacific produced 13,335,524 bushels, or over 41 per cent, and including unreporting counties, fully 14,000,000 bushels, or 45 per cent, of the entire yield of wheat in the state, averaging 24 bushels to the acre, while the average for the state was 17 bushels per acre.

CORN! Kansas, the Fourth Corn State in the Union in 1878, produced 89, in the Union in 1878, produced 89, 324,971 bushels of corn, of which the Golden Grain Beli counties produced 27,399,055 bushels, or 31 per cent, nearly one-third of the entire yield of the state, with an equally grand showing in all other departments of agriculture.

The nextonic t testshow conclusively why 29 percent of the russ ase of fopulation in the State during the past four years; and per cent, in the increase in population during the past year, and '3 per cent, of the increased acreage of wheat in the state in 1878, bolonged to the "Golden Belt."

A FARM FOR "YERYBODY—62,500 forms—5,000,000.

state in 1878, bolonged to the "Golden Belt."

A FARN FOR "YERYBODY.—82,500 farms—5,900,060 acres—for sale by Abansa Pacific—the Best land in America, at from \$2 to \$0 per acre one-quarter off for cash, or on \$0 r11 years credit at 7 per cent, interest. It don't take much money to buy a farm on the Kansas Pacific \$26 to \$80 will secure \$0 acres on credit, or \$120 to \$26 in cash will buy it outright.

Send to S. J. Gilmore. Land Commissioner, Salina, Kas., for the "Kansas Pacific Homestead," a publication that tells about Lands, Homesteads, Pre-cupilon, Soil, Products, Climate, Stock Raising, Schools, Wages, Land Explorers' Tickets, Rates, etc. It is malled free to all applicants.

Read all you can gather about Kansas, and when you decide to start, be sure and start right by locating along the KANSAS PACIFIC RAILWAY.

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