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BREEDERS' DIRECTORY

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The Stock Interest.

Development of the Kansas City Live Stock Market.

EDITOR KANSAS FARMER:-A matter of great interest to Kansas farmers and stock-raisers is the adequateness of the Kansas City market. Kansas City is the market of Kansas, and its prices govern and control all the lesser local markets. That this will continue to be the case there can be no doubt, and upon its growth and development depends to a great extent the prosperity of the Kansas farmers.

I desire to congratulate your readers upon the fact that the demand for stock to be slaughtered here will be nearly or quite doubled within the next few months. The fact that P. D. Armour is building the largest packing house in the world here, to be completed in ninety days, and that other firms are contemplating enlarging or are actually enlarging their plants, is no matter of news to your intelligent readers, though I suppose they do not all appreciate the great influence this will have upon this market. The inevitable tendency must be to lessen the margin between the Chicago and Kansas City live stock markets. Indeed, I can see no reason why, when transportation to deep water on the Gulf shall be cheapened, this market should not be fully equal to Chicago, both in prices paid for live stock and in the magnitude of its business, and this signifies an increase in the value of every farm in Kansas. I do not mean a boom. "Booms" are built upon fictitious values, and always react, bringing ruin and disaster in their train.

The increase of the slaughtering capacity of this market simply means an eager, adequate market, an increase in values and increased prosperity for the farmer who will keep abreast of the progressive spirit of the times and do his part toward supplying the growing demand.

The growth of the live stock business of Kansas City has been marvelous. The Kansas City Stock Yards Company was organized in 1871, and the first commission firm for the sale of live stock was established here in the spring of 1872. Previous to this time Kansas City had been only an unloading and feeding station for Eastern markets. The first large slaughtering and packing houses were built here in 1872. There are now eight firms engaged in the business, with a capacity of 4,000 cattle, 30,000 hogs and 3,000 sheep. The new packing house under construction and proposed enlargement of those in operation, will nearly or quite double this capacity.

I suppose the best way to convey an idea of the growth and magnitude of the business is by a tabulated statement of the valuation of stock handled here for the last twenty years. It is as follows, in round numbers, taken from the twentieth annual report of the Stock Yards Com-

1871	4,000,000,1	8828	32,000,00
1872	9,000,000 1	883	35,000,00
1873		884	41,000,00
1874		885	39,000,00
1875		886	35,000,00
1876		887	43,000,00
1877		888	55,000,00
1878		889	59,000,00
1880			75,000,00
1881			,,

An increase from \$4,000,000 to \$75,000,000 in twenty years is certainly wonderfulan average of nearly 100 per cent. a year over the first year's business.

EDWIN SNYDER.

Cattle at the Fair.

EDITOR KANSAS FARMER:-The breeders of thoroughbred stock in the Dominion of Canada are making preparations to exhibit their best at the great Columbian Exposition in 1893. The governments of the Dominion and the Province of Ontario have sent blank forms to all the principal breeders for preliminary application for space. The expenses of transportation, maintenance and care of all animals will be defrayed by the governments, who will provide professional herdsmen with trained men under them to care for the stock. All stock competing for the honor of exhibition will be examined by experts in the employ of the government, and the most worthy specimens selected, so that we may fairly presume that only the best will be exhibited. It will certainly be the grandest exhibition of stock that ever was held on this

continent, and if our American breeders do not "look a little out" they may be 'left" when the premiums are awarded. In the matter of Short-horns, in which the writer is more especially interested, it will be interesting to note whether the American or Canadian system of breeding, will win the highest honors. It is well known that most American breeders, are breeding for red cattle exclusively to meet the demands of our stockmen, who want them all dark red, while the highest type of the Canadian breeder is the roan, and when he gets a red calf is as much displeased as his American cousin is when he gets another color. The competition of the two systems of breeding will afford an object lesson of great importance to the professional breeder, and when the contest is over and the premiums awarded, it will be profitable to analyze the result and learn a lesson therefrom.

KANSAS BREEDER.

Economical Methods of Using Feed.

The New Jersey Experiment Station presents the following valuable sugges-

Farm animals may be divided into four general classes, viz.: 1, young or growing stock; 2, fattening animals; 3, milk cows, and 4, work horses.

The feeding of animals should, therefore result in securing growth and development, fat, milk, and work or muscular energy. Where stock-raising or dairy ing is not the chief object in farming, these purposes of feeding are not clearly defined, since animals are kept mainly as a means by which the coarse and unsalable products of the farm may be utilized. In any case, however, the economical use of feed requires that they shall be adapted for the various purposes indicated.

The use of farm produce frequently means a serious waste of good food, when the object of feeding is not understood.

To feed properly requires a definite knowledge in relation to the feed used and the animal fed, viz., the composition of feeds, their rate of digestibility by the various animals, the kind and amount best adapted to the various conditions of feeding and their proper combination, and the requirements of the animal other than

The composition of fine feeds has already been considered in this bulletin. Coarse feeds or fodders include the hays, stalks, straws, green feeds, roots, etc. These differ from the feeds proper in being more woody and bulky; they are, as a rule, highly carbonaceous in their

Digestibility depends both upon the composition of the feed and upon the animal fed. In general, the concentrated or grain feeds have a higher and more uniform rate and digestibility than the coarse products; the latter are more easily digested by cattle than by horses.

YOUNG STOCK.

In the feeding and management of young animals the advantages of a continuous and rapid early growth are either imperfectly understood or are ignored. As a rule, no attempt is made, especially in the winter season, to provide an abundance of nutritious and suitable food; too often stalks, poor hay and straw constitute their whole ration. These, though provided in abundance, are not calculated to properly nourish and develop the growing animal, first, because they are poor in protein or muscle-forming material, and hacques they do not furnish ir sufficient amounts the mineral constituents so necessary for the building up of the animal frame. Thus, while the materials are used, the object of the feeding is defeated; proper growth is not maintained.

To these coarse products should be added easily-digestible nitrogenous feeds, of which linseed meal, dried brewers grains, wheat bran and middlings are good examples. A ration is thus secured which is even more palatable and which not only furnishes the food compounds in better proportion for rapid growth, but which also insures a more economical use of the coarse products.

The following are good examples of food combinations for use in the winter feeding of young cattle ranging in age from 6 to 12 months: No. 1.

15 pounds corn stalks. 10 pounds wheat bran. 3 pounds linseed meal.

15 pounds clover hay. 5 pounds wheat bran. 6 pounds wheat middlings. 2 pounds linseed meal.

No 3. 15 pounds meadow hay. 3 pounds corn meal. 4 pounds wheat bran. 2 pounds linseed meal.

The amount of nutriment afforded by these rations would probably be sufficient for the daily food of an animal of 1,000 pounds, though animals of the same weight will vary in their capacity for using food. The characteristics of the animal should be studied by the feeder. For younger stock a still more nitrogenous food would be advisable.

FATTENING ANIMALS.

Stock reared under the above conditions of feeding offer relatively the best promise of sure and profitable returns when feeding for fat. For this purpose an abundance of protein or albuminoids and such concentration as will admit of a reasonable use of the coarse fodders should guide in the preparation of rations. Corn meal, while an excellent fattening feed, should not be used exclusively.

Judicious combinations of farm and fine feeds for fattening animals may be illustrated as follows:

No. 1. 10 pounds corn stalks. 5 pounds clover hay. 6 pounds corn meal. 5 pounds wheat bran. 3 pounds cotton-seed meal.

No. 2. 15 pounds mixed hay. 6 pounds corn meal.
6 pounds wheat bran.
6 pounds linseed meal. No. 3.

No. 3.
10 pounds timothy hay.
5 pounds wheat middlings.
5 pounds dried brewers' gra
6 pounds gluten meal. grains.

These may be used for the various periods of fattening, and permit of a liberal use of farm feeds and a wide choice of concentrated feeds.

MILCH COWS.

Dairy cows require a highly nitrogenous food. In our own work a close approximation to the German standard, 0.4 pounds fat, 2.5 pounds protein and 12.5 pounds carbohydrates digestible, has proved the most advantageous daily ration for a 1,000-pound cow.

It is impossible in the system practiced by grain farmers, to properly feed dairy cows in winter without the purchase of concentrated feeds. Hay, straw, stalks, etc., furnish chiefly the compound carbohydrates, and, however combined in a ration, must result not only in imperfect nutrition but in waste of food.

The feeds that are especially valuable for dairy cows are corn meal, oats, wheat bran and middlings, dried brewers' grains, gluten feeds, linseed meal, cotton-seed meal, hominy meal and malt sprouts. With one or two exceptions these are classed as nitrogenous, and are well adapted for securing well-balanced rations when used in connection with the coarse products of the farm. When dairy animals are strongly fed in winter, roots and ensilage are valuable additions to the ration. Where high-quality butter is the aim of the dairy; linseed meal, cottonseed meal and malt sprouts are less valuable than the other feeds mentioned.

Combinations which have proved valuable in actual trial and which contain the food compounds in good proportions, are

here given: 5 pounds timothy hay.
5 pounds shredded corn stalks.
6 pounds corn and oat meal.
6 pounds wheat bran. 2 pounds coulds. 8 pounds roots. No. 2. 2 pounds cotton-seed meal.

10 pounds mixed hay.
4 pounds corn meal.
4 pounds malt sprouts.
3 pounds wheat bran.
2 pounds linseed meal. 1 pound cotton-seed meal.

10 pounds mixed hay.

No. 3.
10 pounds meadow hay.
5 pounds shredded corn stalks.
4 pounds dried brewers' grains.
3 pounds wheat bran.
2 pounds hominy meal.
1 pound cotton-seed meal.

20 pounds corn ensilage.

6 pounds corn meal. 6 pounds malt sprouts 4 pounds wheat middlings, 2 pounds cotton-seed meal. When the use of straw is an object it may substitute part of the hay in each

No. 4.

feeds and a frequent change is often desir-

Hood's Sarsaparilla

Is a peculiar medicine. It is carefully prepared from Sarsaparilla, Dandelion, Mandrake, Dock, Juniper Berries, and other wellwn and valuable vegetable remedies, by a peculiar combination, proportion and process, giving to Hood's Sarsaparilla curative power not possessed by other medicines. It effects remarkable cures where other preparations fail.

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Is the best blood purifier before the public. I eradicates every impurity, and cures Scrofula Salt Rheum, Bolls, Pimples, all Humors, Dys pepsia, Biliousness, Sick Headache, Indigestion, neral Debility, Catarrh, Rheumatism, Kidney and Liver Complaints, overcomes that tired feeling, creates an appetite, and builds up the system.

Hood's Sarsaparilla

Has met peculiar and unparalleled success at home. Such has become its popularity in Lowell, Mass, where it is made, that whole neighborhoods are taking it at the same time. Lowell druggists sell more of Hood's Sarsaparilla than of all other sarsaparillas or blood purifiers. Sold by druggists. \$1; six for \$5. Prepared only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

tained with a smaller number, if more convenient to the feeder. As in other kinds of feeding the individuality of the animal must be taken into consideration.

American Dressed Beef.

Mr. Barry, of the great dressed beef export firm of Eastmans & Co., said that the decline in the price of American dressed beef in the English markets from 14 cents per pound, five years ago, to 91/2 cents for the last two years per side of 800 pounds average, was due to too many shippers of both dressed and live beef from the United States more than to the competition of other countries in the English markets, says the National Provisioner. This country, said he, ships no sheep or mutton comparatively, while Australia and New Zealand ship no beef, and hence do not compete with us on the other side in fresh meats except as mutton takes the place of and drags down the price for fresh beef in the English markets (as we ship none to the Continent), until American beef often retails there at lower prices than in New York. Of this decline from 14 cents to 91/2 cents per pound in the last few years Mr. Barry said that the decline in ocean freights during that period from \$2.50 to \$1.50 per quarter, of 225 pounds, only pays \$1.00 per quarter, or \$4.00 per carcass of 800 pounds, or 1/2 cent per pound. Only the best American beef is shipped, and it is retailed in English markets as firstclass cuts of English beef. There are no Texan cattle slaughtered here or shipped alive for those markets, as it does not pay, while the River Plate beef that comes to the English markets is of about the same quality as our Texan beef and sells at lower prices, as well as South American canned beef, as no corn is fed in those countries and the cattle are smaller than those shipped from North America.

The present average weekly shipments of dressed beef from our Atlantic ports are 5,000 to 6,000 head; and of live cattle an average of 7,500 to 8,000 head. In addition, Montreal ships from May to November, during opening of navigation on the St. Lawrence river, 100,000 head.

Our present annual shipments of dressed beef are, therefore, at the rate of 286,000 head, and of live cattle 390,000 head, or a total of 676,000 head from this country and 100,000 head from Canada to Great Britain.

The old saying that time is money needs to be changed to time is cost, when applied to fattening stock. The more time is taken to put on flesh the more it costs. Animals fattened quickly have also sweeter and tenderer meat. The secret of quick fattening is never to overload the stomach, and give as large a variety of food as the animal will take. It is overfeeding that induces a feverish condition of body, that not only stops putting on of more flesh, but gives the animal the unpleasant flavor that naturally results from disease, however slight it be.

Agonizing Twists Below the Waistband Are produced by a drenching cathartic. Why use such an irrational means of remedying costiveness? That pure, botanic, painless, philosophic remedy, Hostetter's Stomach Bitters, produces the desired result decisively, but without inconvenience or griping. Dyspepsia and inaction of the liver and kidneys are likewise rectified by this benign restorative A judicious mixture of a number of of health. There is no finer tonic for the debilitated and nervous. Cures malaria able, though the same end may be at- and rheumatism.

Agricultural Matters.

SOIL ANALYSIS.

So much misapprehension exists a to what chemists may do with soils that the following remarks on soil analysis from the conservative pen of Prof. G. H. Failyer, in the Industrialist, is well worthy of attention:

"There is much misconception upon soils, their composition and constitution, and on the relation of these characters to the fertility of soils. In no respect is this more obvious than in the one matter of soil analysis. It is quite natural to suppose that any undue importance that may be attached to information gained by the analysis of soils is to be credited to the zeal of chemists that leads them to magnify the importance of their work, and that this has extended to others. But such is not the case. Chemists, as a class, are very cautious in their estimates of the value of an analysis of a soil. And this caution arises from a knowledge of the limitations of such work. The more thoroughly one studies the subject of the production of crops, the more complex it becomes, and hence the more difficulty he experiences in judging the effect of one or a few conditions.

"All soils are the result of decom-

posed rocks mixed with organic matter, principally decayed plants. The decomposed rock may remain in place upon the rocks from which it came, or it may be transported by water and winds. In sloping lands, the soil is always more or less disturbed by rain water. It is often profoundly disturbed, being carried into the rivulets, brooks, creeks and rivers, even to the ocean. This is seen in the muddy water of every freshet. The accumulation on low lands of material washed from high ground makes the former more fertile than the latter. The rocks in disintegrating are subjected to distinct changes, both proceeding together, and the material resulting from both being more or less intermingled in the final deposit as soil. One of these is mere pulverization. In all soils will be found, in dust form, particles of the same minerals that constituted the rocks from which the soil originated. At the same time a chemical change takes place in the soil. By this means, some parts of it change to compounds not originally in the rocks. By the last means, some of the elements that constituted plant food become assimilable to plants. So that in any soil one will always find some substances that are so soluble that they will be taken up by plants and assist in nourishing the plants; substances of the nature of inert rocks that cannot be used by plants; and often a portion intermediate between these, not in the condition of plant food, but changed from the stable and inactive rock dust it once was to a form especially liable to further decomposition. The rock dust, however stable it may be, is not able to resist ultimately the gnawing teeth of the chemical dioxide, and water, to which it is subjected. It, too, gradually changes chemically. In this way are we to account for the fact that so-called wornout soils recover their fertility after lying idle for a period.

"Roughly, then, the mineral constituents of soils may be placed under the three heads mentioned - that readily taken up by plants, that which is entirely beyond their reach, and that which is in a transition stage. The soil ingredients resulting from decaying plants may be placed in similar classes.

"Although the analyst may readily determine the quantity of the several constituents of the ash of plants that occur in any particular soil, he is unable to determine to what extent they may form the one or the other of the

tion to plants. He can tell a barren soil from a fertile one with unerring certainty, but to classify them relatively is beyond his power. Experience has shown that soils in which the ash ingredients of plants exist in sufficient quantity, in such combinations as to be soluble in water, are fertile. But it would be unsafe to assume that this degree of solubility is an infallible guide.

"The above will give a general idea of the difficulties from the chemical point of view alone. But this takes no account of influence of the physical and mechanical characters of the soil. These have quite as important functions in plant growth as has plant food itself. There are certain characters due to the mechanical condition that are always associated with fertile soil. The following enumeration will serve to show the nature of these: Permeability to water and air; relation to temperature, depending on structure and color; ease with which it may be penetrated by the roots of plants in their search for food; power to retain water and substances in solution; facility with which chemical decomposition takes place within it.

"These mechanical characters are only indirectly connected with chemical composition. And chemical analysis gives little information upon these points. The fertility of the soil, as judged from the crops harvested, may change materially by adding some substance which changes the mechanical condition of the soil, but adds nothing of value as plant food. A mechanical analysis of soils of which we sometimes hear may give valuable information; but just what interpretation to put upon such results as are obtained by separating a soil into particles of certain relative size, is quite questionable. The effects upon plant growth will greatly depend on warmth and humidity of the climate.

"Taking it altogether, a chemical analysis of soils gives information of value, but it must not be expected to answer too many questions. By understanding its powers and limitations, disappointments will be avoided."

Losses in Siloing and Field - Curing Indian Corn.

By F. W. Woll, of the Wisconsin Agricultural College.

The work done at this station in regard to the losses in siloing and fieldcuring Indian corn was continued during the past season on a somewhat larger and simpler scale than heretofore. Only one silo was filled last fall, the partitions having been taken down between what was before six different small silos, making the one silo of a capacity of about eight tons. A piece of land of eighty and two-thirds acres area was planted to corn for this experiment during the season of 1890. The blue grass sod on the land the preceding year was plowed under in the fall. The varieties planted were B. & W. ensilage corn and Pride of the North Yellow Dent corn. The distance between the rows of the former riety was four feet, and of three and one-half feet. The field was very long and narrow; the rows were run lengthwise, and were on an average 1,725 feet long. Fourteen of these rows were planted to B. & W. corn, and the rest to Yellow Dent corn. The corn was cut September 2 to 9. Every other two rows were cut and weighed for the silo, while the intermediate two rows were cut and shocked at once in the field. In selecting such long rows and alternating two for the silo and two for shocked corn, it is believed that any unevenness in yield was obliterated, and the weight for the fodder put into the silo is taken for the weight of the shocked corn as well.

The silo was filled as rapidly as could be done, September 2 to 9, about eighteen loads being cut and filled into it dry matter and 33.3 per cent. of protein; above-mentioned classes in their rela- during each day. In filling the silo the these losses are somewhat lower than

two varieties of corn were mixed by filling in first four or five loads of one variety, and then the same number of loads of the other. The corn was cut into three-fourths inch pieces in filling it into the silo. Separate samples were taken from every forenoon's and afternoon's filling, from sub-samples taken from every load of corn cut. In all 129,014 pounds were cut for the silo. On the top of the green fodder corn 3,800 pounds of green millet were put for a covering. The silo was opened December 12, and we began feeding from it at once. About six inches from the top layer had spoiled, otherwise the silage was good close up to the walls of the silo. The greater portion of the silage was fed out on the feeding experiment previously reported on, and samples from the same were taken once every week, so that in all seventeen samples were obtained from the silo; separate analyses were made of the same for dry matter and protein

The shocked fodder corn was left in the field until a little before it was needed for feeding on the experiment (December 15-April 13). Most of the fodder was therefore left out during the greater part of the winter. The fall was very wet and damp, but the winter was rather dry and with much clear, sunshiny weather, so that it may be said in general that the season was favorable to this system of preserving Indian corn. The dry fodder was fed on the same experiment as was the silage, and sampled every week. The following table gives in a condensed form the total quantities of silage and of field-cured fodder corn obtained from the land, and the quantities of dry matter and protein in both cases:

	Put into the silo.	Taken out.	Differ- ence.	Per cent. loss.
Weight of fodder	Lbs. 129,014.	Lbs. 105,824.	Lbs.	
Weight of dry mat- ter Weight of crude	32,432.	29.090.	3,342.	10.8
protein	2,580.5	2,557.0	323.5	12.5

(b) Field-Curing experiment.

	In fresh shocks.	In cured shocks.	Differ- ence.	Per cent. loss.
Weight of fodder	Lbs. 129,014	Lbs. 31,738.	Lbs.	
Weight of dry mat- ter	32,432.	23,270.0 1,682.0		28.3 34.8

The table shows that the losses of dry matter and protein as found by us during the past year were considerably larger in the field-curing than in the siloing system.

In the silo experiment described above, 3,012 pounds of spoiled silage are calculated in with the actual decrease in weight of the silo. It was taken from the top layer, and was unfit for cattle food. With a still larger quantity siloed than sixty-five tons, this loss from spoiled silage may be about the same, but relatively it will count less, and the losses of dry matter and protein may therefore be slightly decreased. With more experiments conducted on the same scale, it is probable milch cows from ten to fifteen millions; then that we shall find the losses of dry oxen and other cattle from fifteen to matter in the siloing process not to thirty-six millions; sheep from ninety-six exceed 10 per cent. As regards the to one hundred millions, and swine from losses in field-curing Indian corn, last year's results were somewhat higher than the average losses during the preceding three years, and may be accounted for by the long exposure during the fall and winter to rains and snowstorms, conditions that were in no way harder, however, than those to which the majority of our farmers subject their shocked fodder corn.

A few shocks of Indian corn were put up during last fall from the corn grown for the sake of comparison of different varieties. The shocks were left out for exactly three months (from September 13 to December 13).

The average losses found for all the shocks are in this case 15.7 per cent. of

found in the experiment just reported, as would naturally be supposed, as the shocks in this case were left out for a shorter time. They were out in the fall, however, when we had hard rain storms and much damp weather, which would make the losses greater during this period.

If we summarize last season's work with that of the preceding three years, in the same way as was done in last year's report, we have the following table:

Average losses in siloing and field-curing Indian corn.—Results of four years' work.

The state of the s		As fed out and sampled	Differ- ence.	Loss. Per cent.
A.—Siloing System.	Lbs.	Lbs.	Lbs.	
Total quantity of— Dry matter Protein B.—Field - Curing System.	68,034.3 5,490.8		10,623.6 921.3	15.6 16.8
Total quantity of— Dry matter Protein	72,163.6 5,706.4		17,226.6 1,388.9	

The average losses of dry matter in siloing Indian corn, according to these results, are 15.6 per cent. and in fieldcuring the same fodder 23.8 per cent. For reasons already given, we feel inclined to believe that the former result may still be too high, owing to the small quantity of fodder siloed in previous years' experiments. Our work in this line would therefore lead us to the conclusion that the losses sustained in the field-curing and field-storing of Indian corn greatly exceed those in the siloing process.

SUMMARY.

1. Sixty-five tons of Indian corn siloed at this station last fall lost 10.3 per cent. of dry matter and 12.5 per cent. of protein during the siloing period.

2. In shocking and curing a similar quantity of fodder and leaving the shocks in the field during the greater portion of the winter, 28.3 per cent. of dry matter and 34.8 per cent. of protein was lost.

3. The average losses in siloing and in field-curing Indian corn, as determined during the last four years' experiments at this station, amount to 15.6 per cent. and 16.8 per cent. for dry matter and protein, respectively, for the siloing system, and 23.8 per cent. and 24.3 per cent. for dry matter and for protein, respectively, for the fieldcuring system.

Thereby Hangs a Tale.

'And so from hour to hour, we ripe and ripe, And then, from hour to hour, we rot and rot, And thereby hangs a tale."

And thereby hangs a tale."

And truly, "'tis a tale of woe," of one who had Catarrh in the Head, for many years, and who really has been "rotting," from hour to hour, until Dr. Sage's Catarrh Remedy came to his notice. He used it at first with slight signs of relief, but he persisted until a permanent cure was effected, and the world was again pleasant to live in. From his awful suffering he was set free by the expenditure of a few dollars in that incomparable remedy.

In the twenty years between 1870 and 1890, according to government statistics. we learn that in round numbers the horses have increased from eight to fourteen millions; mules from one to two millions; twenty-six to fifty-one millions.

Pensive and Expensive.

Many a woman shrinks from consulting a physician about functional derangements and weakness, and prefers to suffer in silence. She is sad and pensive, and her neglect of her aliments will prove expensive. It may cost her her life. One of the most skillful physicians of the day, who has had a vast experience in curing diseases peculiar to women, has prepared a remedy which is of inestimable aid to them. We refer to Dr. Pierce's Favorite Prescription, the only remedy for woman's peculiar weaknesses and aliments, sold by druggists, under a positive guarantee from the manufacturers, that it will give satisfaction in every case, or money refunded. faction in every case, or money refunded.

Farm Loans.

Lowest rates and every accommodation to borrowers on good farm loans in eastern Kansas. Special rates on large loans. Write or see us before making your renewal. T. E. BOWMAN & Co., Jones Building, 116 W. Sixth St., Topeka,

Assiance Department.

Property Basis for Money.

EDITOR KANSAS FARMER:-In the old party political organs, we see it asserted that the coming campaign will be an educational one, meaning, probably, that our wise leaders from the halls of legislation would circulate among the people and teach them all about finance and the tariff. If they are no more successful in teaching them about the finances than they have been in educating them about the tariff, they might just as well remain in the halls of Congress and try to educate themselves. The question of free trade and tariff has been a fruitful theme for politicians and office-seekers for more than fifty years, and still they want to divide the people and ride into office upon this apparently insolvable problem. And may they not take the same course in educating the people in regard to our finances? They persist in talking about the quantity of money per capita, as if there was some direct relation between the number of population and the amount of money issued by the government. Now, it seems to the writer that if we had ten times the number of people that we have and ten times the amount of money in circulation that we have, that without property the money would be entirely useless. In other words, money is of no use without property. Therefore, the intelligent point of beginning to judge of the amount of circulating medium needed, is to know the amount of property in the hands of the people, and the amount of money issued thereon. For, be it understood, that no matter what other basis is supplied for the issue of money, the first, last and best, is the confidence of the people, so that they will exchange the products of their labor for it. And here let me say that all other legislation, compared with that upon finance, sinks into insignificance. And why? It is not an abstruse question. Place it where the wayfaring man, though a f-armer, can understand it and all will be well. But if you will leave it in the hands of a Secretary of the Treasury, and the unquestioned manipulation of Congress to issue it as the appropriations, politicians, policy of the party in power, contractors and stock jobbers call for it, then indeed may you expect your Secretaries of the Treasury to buy their way to any office, and be reckoned among the millionaires of the country.

Leavenworth, Kas.

Was it Paternalism in Switzerland?

A few days ago we sent the following article from the Southern rercury to Prof. J. D. Walters, of the State Agricultural college, and asked him what he knew about the facts in the case:

IT HAS BEEN TRIED.

Fifty years ago Switzerland passed through much of the same ordeal that the farmers of the United States are now enduring. Bank issues of money at usurious rates of interest had impoverished the people. They were mortgaged heavily and there was a prospect that the usurers would soon take the lands in settlement of the mortgages. Then the patriotism of Stæmpfil suggested a remedy. A government bank was established. The public credit was printed on notes, and these notes were loaned to the farmers on mortgages, running thirty years at 3½ per cent. interest, the borrower to pay back one-thirtieth of the principal annually. The old mortgages were taken up. Shylock kicked, but it was of no avail. The people were relieved, and have since been happy and prosperous, because their own credit for money and profit by the transaction.

The Professor, who is a native of Switzerland and conversant with the history of the country, replied as follows:

"In order to understand the facts stated in this clipping, one must be acquainted with the conditions existing in Switzerland at that time. The debts of the peasantry, which were assumed by the cantonal governments, were of feudal origin. The French revolution and the invasion of the French army in 1798 had freed the Swiss people from all feudal titles, and an entirely new system of representation and taxation had been adopted by the Helvetic Republic, but after the overthrow of Napoleon in 1815, the old order of things was again restored-the old oligarchy was re-established. The right to hold office was again restricted to the aristocratic families, and the old ground .rents were once more extorted from the peasants.

"These ground rents did not belong to the government proper, but to the gov-

ized, though they had been inherited. bequeathed, bought and sold for centuries. In about 1830 the political atmosphere in Europe became more liberal again. France took the lead, overthrew the autocratic government of the Bourbons and seated a citizen king. In Switzerland the farmers began to complain of the rents, claiming these to be entirely unjust remnants of the feudal system, and threatened the overthrow of the government. In some cantons payment was refused and collections resisted by force. The aristocracy became alarmed and offered settlement by way of capitalization and conversion of all claims into modern real estate mortgages. It was then that the patriotic statesman, Stæmpfli, to whom America owes the settlement of the Alabama difficulties, succeeded in inducing the cantonal governments to assume the payment of a compensation to the aristocracy for all rents, and requiring the farmers to pay a certain tax to the government for thirty years as a partial reimbursement. The result was a debtless peasantry. Up to 1850 the twenty-two Swiss cantons were only loosely connected and the history of this remarkable movement is somewhat different for every one. but the above are the main facts to which your clipping refers."

The Money Power.

The News believes that the restoration of silver to its constitutional place in the currency is of supreme importance to the toiling millions of the American people,

them to their energies in expend fighting each other over questions of no importance to us except as tethers to lead the common herd .- Wall street private and confidential circular."

Cleveland and the Alliance.

Some time ago the Chicago Herald gave the following warning:

"Senator Irby, of South Carolina, has intimated that the Southern members of the Farmers' Alliance will secede from the Democratic party if Cleveland is nominated for President at Chicago. 'His nomination,' the Senator says, 'would tear our local organizations all to pieces through the South. There would be very great danger of the strength of the third party in many of the Southern States.'

"The Herald has repeatedly pointed out the objection to nominating Cleveland as coming from two directions. One is the belief, which largely obtains among shrewd political observers, that he could not carry New York in the election. The other is the opposition to him in the ranks of the Farmers' Alliance, whose members in South Carolina and other Southern States constitute from one-half to threefourths of the Democratic organization.

"If Mr. Cleveland should be nominated there is almost certain to be a revolt in the Democratic party by the Alliance. Its members will largely vote the ticket of the third party, thus destroying all hope of Democratic success. They will vote the Democratic ticket if any man now prominently mentioned as a candidate, while to the mining region it is a question except Cleveland, be made the Presiden-

ADAM'S PORTABLE GRANARY. MANUFACTURED BY W. J. ADAM, JOLIET, ILL.

that so long as the dictum of the money power, enunciated through the manipulation of party conventions, is tamely submitted to under the influence of mistaken partisan fealty, just so long will that power maintain its dangerous ascendency and continue to bear with steadily increasing oppressive force upon the people.

The capitalists and money brokers of the East have demonstrated their ability to shape the action of two great conventions, which were run by officeholders, ex-officeholders and sordid professional politicians, elements which were present in sufficient force in each to neutralize all honest and disinterested on position to the schemes and will of the single standard conspiracy.

Resistance to the enemies of bi-metallism under those conditions having proved futile, despite preparatory agitation and intelligent effort which cannot be surpassed in any future contest, there is no remaining alternative except hopeless surrender with assured prospective destitution, or an appeal from conventions so handled to the people and an independent ballot .- Rocky Mountain News.

The Texas Stockman and Farmer is responsible for the following: "The people must be kept in a state of political antagonism. The question of tariff must be urged through the organization known as the Democratic party. The question of protection with reciprocity must be forced into public view through the Republican erning families. They were not capital- party. By dividing the voters we can get

of industrial life or death. It also believes | tial nominee. Their preference, however, is for a Western man.

> "With the factions in New York and with the murmurings of the Alliance in the South, the Democrats are having ample warning of the dangers which Mr. Cleveland's nomination will invoke. Under the circumstances it would appear to be the part of wisdom to take the Democratic candidate for President this year from the West, thereby assuring a party triumph in November."

Against the Nominee.

Democratic daily paper of wide circula- of the National Educational Association antagonism to silver of the recently made platform of its party, and particularly of the candidate of that party for chief executive, and boldly bolts the nomination, expressing its views in the following words in a leading editorial in its issue of June 23:

The worst apprehensions of the friends The worst apprenensions of the friends of free silver have been verified in the nomination of Grover Cleveland for the Presidency by the Chicago convention. The News has repeatedly identified Mr. The News has repeatedly identified Mr. Cleveland as among the most uncompromising enemics of silver in the United States and not exceeded in his subserviency to the single standard financial combination by any other person. Mr. Cleveland's record sustains the truth of this representation of his views, and his most ardent political supporters accept it as true and base his claims upon the suffrages of the American people as much upon his attitude to the colnage question as upon his relation to the tariff.

Such being Mr. Cleveland's position, Colorado and the West have no more inveterate or determined opponent, and his nomination at Chicago has effected no

change in the relationship, nor diminished to the extent of an atom the disastrous consequences that his dnancial policy would entail upon the agricultural and mining industries.

The result this morning and the attendant circumstances leave no doubt that the same financial power which swayed the recent convention at Minneapolis was supreme at Chicago. Mr. Cleveland was Wall street's candidate as much as Mr. Harrison is Wall street's candidate.

The News has been a loyal and consistent exponent of Western interests for more than thirty years. A crisis has now arrived when it is forced to choose between a Democratic nominee for the office of President and the most vital industrial interests of the Rocky mountain region. It conscientiously believes that the said nomination was effected by undemocratic influences and that the nominee represents nomination was enected by undemocratic influences and that the nominee represents a financial policy that antagonizes the historic record of the Democratic party, the true intent of the national constitution and the uniform practice of the government for more than eighty years.

In view of these facts, and moved by these convictions, the News unhesitatingly elects to sustain the people and the industries of the section to which it has been so long wedded, and refuses to betray those interests by supporting Grover Cleveland for the Presidency, thus becoming a party to a financial conspiracy the culmination of which would involve cer-tain and ruinous disaster to all who are concerned in silver mining, and would as surely prove calamitous to the producing population of the United States.

Adam's Portable Granary.

Again the inventive genius of Yankeedom evinces itself in the interest of the farmer, and this time in the form of a device for storing away the farmer's products. There has been for years a demand for something in the line of a portable granary which can be easily erected in the field adjoining a thresher or sheller as the case may demand, and thus avoiding the necessity of having a large number of teams at hand to haul away the grain as it is threshed or shelled. By the use of this ingenious device, threshing and shelling may be carried on at a great saving of money and labor, and the grain marketed at the convenience of the farmer and enabling him to hold his grain until there is a satisfactory market for it. At this time, when the grain harvesting is confronting us, such a device will be fully appreciated. Reports are coming to us of the immense yields in the Southwest, and the encouraging prospects of the West and Northwest, and, no doubt, the farmer is wondering what to do with it after it is threshed. It is frequently the case that grain has been sold for want of storage, which causes the farmer to lose more money than the cost of these granaries by the forced necessity. Adam's Portable Granaries are circular in form, and for this reason they will hold about 25 per cent. more grain than a rectangular building, using the same amount of material. The fact that they are circular makes it possible for them to withstand the wind to a greater extent than a rectangular building. They are no cheap clap-trap makeshift, but a good, well-made, perfectly-fitted circular building, constructed on the most approved scientific principles. Full descriptions of these granaries may be had by writing the manufacturer, Mr. W. J. Adam, Joliet, Ill. We are advised by our Chicago manager to recommend these to our readers, and he tells us that he has seen the granary and knows it to be all that is claimed for it.

Excursion to Saratoga.

For the pretty schoolma'am and her The Rocky Mountain News, a free silver friends, the great meeting of 1892 is that

The date is July 12-15.

The rate is one fare for round trip (plus \$2.00 membership fee), and is open to everybody.

With great wisdom, the Kansas teachers have selected the Santa Fe route to Chicago as the official line for their special vestibuled train. Through chair cars and Pullman sleepers have been assured.

This train will probably leave Kansas City evening of July 8.

A better chance is rarely offered for a cheap trip to the old homestead "back

Local agent of A. T. & S. F. R. R. will esteem it a privilege to fully explain the

Do not expose the cattle needlessly in hot, unshaded pasture fields. It costs money to repair the waste occasioned by

The Borse.

Salting Horses.

EDITOR KANSAS FARMER: - In the FARMER of June 15 is an elaborate essay upon salting horses from, a correspondent of Clark's Horse Review. I have practiced several different methods of salting stock, and have settled upon the following: I take a kerosene barrel and saw it in halves across the middle, fill it half full of salt (rock salt preferred), and fill it up with water. Attend to it regularly and keep it full of water. The cattle go to it when they need salt, get all they want in a moment, with the least waste, and go off to feeding. I have tried rock salt in big lumps left on the ground, and my opinion is they do not get enough by this method, and it takes them too long to get what they want, and some will get tired of waiting for the bosses to get satisfied, and go away without any. This way of salting takes less salt than any other method; they will not use half so much, and for that reason I am sure they do not get enough. But I think the true economy is in giving them all they want, which they are sure to get when they can lick their tongue into the brine two or three times and go away, and there is no waste to speak of. It is necessary to drive three or four stakes into the ground around the salt tub to hold it in place. D. P. N.

Council Grove, Kas.

Standard-Breds for All Work.

In your issue of March 16, Mr. E. T. Dougherty, in his reply to Mr. Burgess' strictures on the "all-purpose horse," defines his idea of the "all-purpose horse" as follows:

He is well bred, not weighing over 1,200 pounds and hardly ever over 1,150 pounds; he has good action, you can plow him all day, and ride him sixty miles in a day and drive him back the next without hurting him, * * * and will sell for \$175 to \$500.

I accept this definition or description of an "all-purpose horse," and will proceed to answer to the best of my ability the query by the *Gazette* closing the communication of Mr. E. T. Dougherty.

I will say frankly many standard-bred trotting and pacing stallions, crossed on good roadster mares, weighing from 900 to 1,200 pounds, also standard-producing and standard-bred mares, have produced and are now producing the best all-purpose horse the world has ever known.

With this object mainly in view, we commenced some four years since to make horse breeding the special feature of our farm, and selected for our premier stallion a horse sired by Egbert 1'36, dam Cut by Brignoli 77; second dam Crop by Pilot Jr. 12, and weighing about 1,200 pounds. We had several well-bred roadster mares doing our farm work and have added several others, some standard-bred and some standard-producers. We reasoned from this standpoint: It is seldom our best standard stallions put more than 3 per cent, of their get in the 2:30 class so as to command large prices, leaving 97 per cent. to find some other market or meet some other demand. It is this 97 per cent. we have kept mainly in view, and we are not disappointed or going to be disappointed, for while I am now writing, three of our brood mares, with a gelding, hitched to two wagons, in pairs, loaded with live hogs, weighing 3,600 pounds to each load, are on their way to the stock yards at Indianapolis, Ind., fourteen miles distant, and will be back home in the evening to work on the farm to-morrow, and will then plow more in a day than any heavy draft horses I ever knew. The next day, should we wish, they would pull a spring wagon sixty miles and return the following day without injury. Two of these mares are standard-bred and one nearly so, and will weigh respectively 1,050, 1,100, 1,150 pounds. Our brood mares do our farm work, and do it satisfactorily.

We expect our four-year-old geldings sired by standard stallions to average us over \$200 each. Why? Because they are good sized—sixteen hands—stylish, good colors, manes and tails, and good roadsters for gentlemen's drivers or family horses. Just such as these are and always will be in good demand by men and women who are able and willing to pay a good price for what they want. These geldings will pay us well for their raising—far better than a lot of fat cattle we have just closed out at a loss, not paying us the cost of the grain and grass they consumed.

In addition to this we have a gelding

that promises to make a low record this season, although we have been working him on the farm considerably, and he will probably bring us \$1,000, possibly double that sum, for he is sired by our own standard horse and out of a well-bred mare. Should we realize our expectations from this gelding we will accept it as one of the prizes that occasionally fall to the lot of those engaged in breeding standard horses. At the same time we are justified in saying we have one or two other very promising colts that we hope will be fast. We have our own half-mile regulation track, and we try to develop our colts enough to find out if we have anything extra fast that will go in the 2:30 class, so as to realize as much as possible from our business. In any event we are very sure to get a good roadster, and it goes into the 97 per cent.

Now a word or two to the breeders of standard-bred stock: Let us avoid the rock on which the breeds of Short-horns foundered and profit by their error. For many years they seemed to be guided alone by pedigree, without much regard to individual excellence, and so taught many beginners. We all see the disastrous results-a vast number of pedigreed scrubs; worse than a curse, for it has produced distrust upon the best breeds, upon the minds of many as to the value of the breeds themselves, and entailing widespread loss upon the designing as well as the honest, faithful breeder, involving all in the common disaster.

We are only establishing a distinctive breed of horses, and it being purely American, every citizen of the United States should be proud of our attainments and deeply interested in what will be accomplished in the next half century.

Until recently in the establishment of the breed of standard horses nearly every other quality has been sacrificed to speed, with but little regard to individual excellence or soundness, but we have begun to realize that 97 per cent. are not winning fast horses and we must find a market for them or the business will not pay, and if they are not fast, are undersized, unsound, and poor individually, where will you find a market? You simply have a poor pedigreed scrub; you are traveling the road the Short-horn men trod in anguish.

The demand is here; the hour is at hand when pedigree is only a part. Essential it will always be, but there must be individual excellence, including not only speed but good size, style, color, beautiful, proud, action, symmetrical form, and, not least, great endurance. As to the latter, the writer is of the opinion there are now every year on the race course examples of greater endurance in the contests for supremacy among standard horses than is shown by the thoroughbred or any other breed of horses. The quality of endurance in the thoroughbred is being fast eliminated by the manner of races as at present conducted, being only a single heat for short distance. The writer would like to see the old style of running races revivedtwo and three mile heats and repeat. The dunghill was not in it. It developed and required a great quality-endurance.

Let breeders of standard horses use the knife liberally. Do not let a great pedigree deter you, but so important do we regard standard breeding that we use the knife without hesitation on all non-standard colts, and will not spare even the standard-bred unless there is good individual excellence. Thus we will progress onward, perfecting the American standard-bred, from which will be produced not only the two-minute horse, but the most superb "all-purpose horse" the world has ever known.

I do not wish to disparage any good breed of horses; "many men have many minds." There is a place and room for all distinctive breeds of good horses in our country. I have only tried to give my opinion of my choice breeds and their excellence and future capabilities, and if in illustrating I have been too personal, my one excuse shall be, I knew of no better way than illustrating by actual experience of demonstrated facts.—E. A. Olleman, in Breeder's Gazette.

Pallor, languidness, and the appearance of ill-health being no longer fashionable among ladies, Ayer's Sarsaparilla is more largely resorted to as a tonic-alterative, nervine, stomachic, and builder-up of the system generally. This is as it should be. Ayer's is the best.

Well Machinery Send for; illus.cat'l'g. Pech Mfg.



FOSTER BUGGIES, CARRIAGES AND HARNESS of are the originators of selling first-class work direct from our Factory at factory prices. We use the best material, and our guarantee is placed on all vehicles. We sell Buggies and Carriages or \$45.25 AND UPWARDS. If you WANT A BUGGY FOR NOTHING, order a sample and sell eight for us. The money paid for sample can be deducted when you order the eight, (same as sample, ddress FOSTER BUCGY & CART CO., NO 11 Pike building, CINCINNATI. O

Gossip About Stock.

The Kansas Farmer would like to hear from every breeder who has any stock for sale, or that intends to exhibit at any fair this season. Please write this office at once, stating what your herd consists of and what you have for sale, or what will be exhibited.

A rare bargain is offered in stock for sale by J. H. Sanders, of Topeka. The stock which must be sold soon consists of some choice Short-horn cattle, including a Cruickshank bull at head of herd, also some full-blood and high-grade Clydesdale mares and fillies. See advertisement.

Foster Bros., Shropshire breeders of Allegan, Mich., are fitting their new farm conveniently for breeding purposes. Our Mr. White recently visited their farm and was shown the Shropshires that are its tenants. They have some good sheep and are thoroughly conversant with the business.

Gov. Glick, of Atchison, reports that his crop of Short-horn calves from the celebrated Bates bull, which heads his herd, are by far the finest lot of pure-bred stock he ever saw. To farmers and breeders who desire some strictly meritorious animals he cordially invites them to visit his farm, and he will guarantee stock and prices to be satisfactory.

"Another seeming impossibility submits to ingenuity and becomes a practical fact." The Inventive Manufacturing Company, "The Rookery," Chicago, Ill., have an ingenious device for preventing horses from switching their tails over the lines. This ingenious device is the invention of Mr. Andrew V. Callahan. Mr. Callahan has been a writer for many of the agricultural papers, is an experienced farmer, and has put to a practical test his invention with his own horses on his farm. This is something that every farmer should use, especially with horses which have the uncontrollable habit of getting their tails over the lines. The Inventive Manufacturing Company will send a circular, giving full information, to those applying.

A farm of 570 acres of the richest kind of soil, with plenty of timber, shady pasture, and living water upon it, is a possession of which to be proud. Riverside farm, of Plainwell, Mich., the home of the Poland-Chinas-at least a very large number of them-is one of the finest in Michigan. The genial proprietor, Mr. Levi Arnold, entertained our Chicago manager at his fine village home at Plainwell. He possesses the happy faculty of entertaining immensely well, and is proud of an opportunity of showing what he has spent his life-time to achieve—a well-equipped stock farm, stocked with finest breeds of swine, sheep and cattle, with all the equipments and conveniences necessary or successfully conducting such a business is, indeed, a pleasant thing to view. Mr. Arnold has the largest herd of Poland-Chinas registered in the Ohio herd book has some of the finest specimens, and has probably won more honors at shows than any other breeder. He also has a very fine

lot of Shropshire sheep, Short-horn and Jersey cattle. The good blood idea runs through his entire stock. The poultry and work-horses have it. Mr. Arnold is entitled to a great deal of credit to the success that he has attained in stock-breeding.

We Sell Live Stock.

Our cash sales for 1890 were \$1,904,199.38 total business exceeded two and one-half million dollars. Established since 1880. Market reports free and consignments solicited from stockmen, by Offut, Elmore & Cooper, Room 14 Exchange Building, Kansas City Stock Yards.

The Popular Route for Summer Tourists.

In going to the mountain or ocean resorts of the East you are sure of a pleasant journey if your ticket reads via Vandalia & Pennsylvania Lines from St. Louis. Direct route to principal places of Summer sojourn along the Atlantic, in the Alleghenies, Adirondacks and the Catskills. For details address Chas. E. Owen, Traveling Passenger Agent, Kansas City, Mo.

Summer Resorts Reached via Vandalia and Pennsylvania Lines.

Atlantic City, Cape May, Long Branch and the numerous resorts along the Atlantic seaboard; Altoona, Bedford Springs, Cresson, and inviting retreats in the Alleghenies, the Catskills, Adirondacks and mountains of the East, are reached from the Southwest and West via St. Louis and the Vandalia and Pennsylvania Lines, the direct route to the East. For deta!!s address, Chas. E. Owen, Traveling Passenger Agent, Kansas City, Mo.

Better Than a Gold Mine,

Are the rich farming and grazing lands in the fertile Arkansas River valley in south-central and western Kansas now offered for sale by the Atchison, Topeka & Santa Fe Railroad Company on easy terms and at reasonable prices.

These lands are all valuable, being original selections which have reverted to the company on canceled sales. None better can be found, either for stock and general farming or investment.

Fine irrigable fruit lands in the wonderful Mesilla valley, near Las Cruces, in southern New Mexico, equal (except for citric fruits) to any California fruit lands, are also offered at much less prices than this class of soil usually commands.

For information, apply to John E. Frost, Land Commissioner, A. T. & S. F., Topeka, Kansas.

If there are dry, bare knolls anywhere in the pasture, sheep will repair to these to lie at night and so bring them up to equal other portions of the field.

No matter how good a milker the cow is, a calf should never be reared from her if she possesses a weak constitution or is suspected of organic diseases.



The Some Circle.

To Correspondents.

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

Days of My Youth.

[The following poem was written by Judge St. George Tucker, the step-father of John Randolph, of Roanoke, grand-father of J. R. Tucker, late member of Congress, and greatgrand-father of Charles Washington Coleman. Contributed by M. Louisa McClelland.]

Days of my youth,
Ye have glided; away;
Hairs of my youth,
Ye are frosted and gray;
Eyes of my youth,
Your keen sight is no more;
Cheeks of my youth,
Ye are furrowed all o'er;
Strength of my youth,
All thy vigor is gone;
Thoughts of my youth,
Your gay visions are flown.

Days of my youth,
I wish not your recall;
Hairs of my youth,
I'm content ye shall fall; I'm content ye snan ran;
Eyes of my youth,
You much evil have seen;
Cheeks of my youth,
Bathed in tears you have been;
Strength of my youth,
Why lament thy decay?
Thoughts of my youth,
Ye have led me astray.

Days of my age, Ye will shortly be past; Pains of my age, Yet awhile ye can last; Yet awhile ye can last;
Joys of my age,
In true wisdom delight;
Eyes of my age,
Be religion your light;
Thoughts of my age,
Dread ye not the cold sod;
Hopes of my age,
Be ye fixed on your God.
—Lippincott's.

Luck and Labor.

Luck doth wait, standing idly at the gate,
Wishing, wishing all the day;
And at night, without fire and without light,
And before an empty tray,
Doth sadly say,
"To-morrow something may turn up;
To-night on wishes I must sup."

Labor goes plowing deep the fertile rows,
Singing, singing all the day;
And at night, before the fire, beside the light,
And with a well-filled tray,
Doth gladly say,
"To-morrow l'il turn something up;
To-night on plenty earned, I sup."

OLD COINS.

An article in "Home Circle," of May 18. telling of a bean-baker's collection of old coins, attracted my attention, as it reminded me of a certain handful of ancient money which had lain at the bottom of my bureau for many years.

I am now an elderly woman of sixty, but in my younger days I accompanied my father to Italy, when he was appointed United States Consul at Naples; and while there, among many other pleasant events, occurred one which placed me in possession of the queer metallic pieces I have ever since kept as mementoes of the most interesting excursion I made while in that country. The coins, to be sure, are not very pretty, neither would I expect to be pretty if I should be in existence at the age of some two thousand and odd years as they are. The edges are rough and not round like English or American metallic money. I take up one piece and examine it, as I have done many times before. I find on one side the outline of a woman's head, with a band across the top from ear to ear, as if to keep the hair in place. On the reverse is the figure of a man's body, a dog's head and a dragon, KUMATOS. From this I know it to be a coin about 2,100 years old, which was of the circulating medium of the city Cumae, but how much of it "per capita" was in circulation, or whether Cumae enjoyed "free and unlimited coinage of silver" is quite uncertain.

Another coin has the figure of a woman's head on the one side, with a band confining the hair, but this band extends from the ear, across the top of the forehead, to the other ear; on the reverse side of the coin is the figure of a bull, with flying angel above, placing wreaths on on the horns of the animal, and underneath are the Greek letters equivalent to NEAPOLITAN. From this I know it to be a coin of the ancient city of Neapolis, and, also, more than 2,000 years old. Among my collection are other Greek and Roman coins, a description of them all would not be interesting reading.

One beautiful May morning, ever so

Pompeli. I was the youngest of the party, and as such received favors and attention from every one on board. While enjoying the ride, the one subject of conversation was Pompeli, each one trying to recall all the incidents known concerning its destruction so long ago, and its recent discovery and excavations made to bring its ruins to view. My father repeated to me the story, how, in the year 79, nearly 1,800 years then gone by, the great mountain Vesuvius seemed on fire and belched forth fire, smoke, ashes, mud, water and red-hot stones, and how a mighty stream of molten lava ran down the steep sides of the mountain and in a few hours covered the once beautiful city, and so completely obliterated every trace of it that its locality was forgotten, and for nearly 1,600 years no one knew its exact situation. The recital caused a feeling of fear to creep over me, and, as I looked up to the top of the terrible mountain and saw smoke issuing from its crater, I could not help fearing that it might again cover the surrounding country and bury us all under melted lava. However, we soon landed near the ancient ruins and walked up the avenue called "Street of the Tombs." This avenue was one of the first to be uncovered and "restored" to anything like original appearance. On either side we saw the tombs of the Astors and Vanderbilts, of thousands of years ago. This was Pompeli's "Greenwood Cemetery." The names on the tombs were somewhat different from any I knew. One bore the name "Marcus Lucretius," another, "M. Tullius Cicero," and still other names owned by Latin and Greek families who had in the long ago made Pompeii their place of abode or summer sojourn. This city on the sea shore having been to Rome, what Long Branch and Coney Island are to New York, viz., a place for summer pleasure. The first building we visited was the museum, where are collected many of the curious mementoes which have been uncovered in the buried city. Here we saw furniture taken from the houses, vases and beautiful articles of pottery; but the most interesting, and at the same time most terrifying, objects we saw were perfect casts of human figures. These we were told were bodies dug out of the ruins, where they had lain for 1,800 years. Some were straight, others bent as though in death they had been tortured and twisted in horrid shape. The lines on the faces could be distinguished. On some a peaceful look, as though death had come to them painlessly. On others the features showed such contortions as to indicate that death had been attended with such anguish as fire and suffocation could produce. While we were wondering how it could be possible that these forms could have been preserved whole for so many years, a messenger came in and informed us that the workmen had uncovered another house and several bodies had been discovered. We all hastened to witness this untimely resurrection. As we came to the place we saw the

under the protection and escort of my father, set sail from the city of Naples in a small yacht, to ride across the bay of Naples to the site of the ancient city of

walls of a freshly uncovered house, but nothing but hard ashes seemed to fill the whole space. The Superintendent gave us the information that when the city was buried, the ashes and mud were packed tight on the bodies of those who were killed. The water from the volcano, and across the top are the Greek letters as well as subsequent rains, formed a complete mud cast around each body, in which, of course, each limb and even each line of the face and muscles of the hands were perfectly moulded. The bodies wasted away, but the mould remained. We now saw two men approaching with a huge load of liquid plaster of Paris, and they began pouring it down into an opening in the ashes as it appeared to us. More of the liquid was brought until the cavity was full. A rest was then taken for nearly a half hour, during which time we listened to the description of the excavations as told by the Superintendent. The plaster by that time was considered hard enough to remove and the workmen began carefully to dig around the place where it had been poured. Soon the perfect form of a human being was uncovered and carefully lifted out. The ashes and dirt were loosened from the plaster, and there before us lay the form many years ago, a party of Americans even her hair was perfectly moulded in Pills. of a beautiful girl, about my own size;

Dr. Price's Cream Baking Powder

CONTAINS NEITHER AMMONIA, ALUM OR ANY OTHER INJURIOUS DRUG.

The Wisconsin Dairy and Food Commissioner says

In his Annual report for 1890, on page 82:

"The NATIONAL DISPENSATORY says of Carbonate of Ammonia: 'It is irritant, and if long continued, even in doses which the stomach will tolerate, it impairs nutrition; in doses of five to ten grains it increases the fullness and force of the pulse and causes a sense of lightness in the head. It is one of our most powerful medicines and certainly should not be used in the preparation of foods."

On page 85 the report further states:

"The result of experiments would indicate that the residues in bread made from Alum Baking Powder, have a decided effect even on a strong and healthy stomach. The weight of testimony is decidedly against the use of ALUM.

The following powders contain either ammonia or alum, or both: Royal, Calumet, Forest City, Pearl, Unrivalled, Echo, Crown, Chicago Yeast, Bon Bon, Star, New Era, Snow Ball, Zipp's Grape Crystal.

the plaster, as were also her ear-rings and bracelets. Her face was beautiful and no line of pain showed that death had been attended with suffering in her case. Her right hand had been extended as though she was carrying something when she fell face downward. The workmen, who were still digging, now brought up a small iron box which evidently was the object carried by this girl when the horrible rain of ashes overcame her. This box was presented to me by the Superintendent as he explained to my father that I was about the same age and size as the one who last possessed it, and being by when found, he would consider that I was the rightful owner of it. It was soon pried open and inside were found the coins I have described and also a roll of parchment carefully wrapped in some kind of oiled cloth which had preserved the writing completely. This proved to be a diary of the young lady lying before us and a story of her life even to the very day of her death. It was written in Greek but I afterwards was enabled to translate it all, and if my rheumatism will permit me I will some day make and send a copy of it for "Home Circle."

Reflections.

This morning as I sat sewing, in my cool, half-darkened room, I thought what a restful feeling it gave one, to be away from the noise and bustle of city life. I could hear the little ones at their play and the rustle of the leaves as the wind blew through the trees. A mocking bird was perched high upon the windmill and singing as though he thought the world was made for him. And then I fell to thinking of the terrible calamity in Pennsylvania. I could almost hear the rushing of the angry waters as they swept remorselesely along, leaving death and destruction behind them. And I heard the last cry of the poor victims as they were borne along, and their souls were wafted into the realms of "eternal life." For them there is joy evermore; but, alas, for those that are left. It will be many days before the least bit of sunshine will seem bright to them. Their constant cry will be: "What had we done that we should be so punished?" It will be a long time ere they can say, "Thy will, not mine, Oh! Lord."

Oh! mothers, safe in your happy, peace ful homes, as you gather your dear ones around you, give a thought to those unhappy people who are afflicted. Utter not a complaining word, lest you may murmur when too late.

"How many go forth in the morning, Who never come home at night; And hearts have broken, For harsh words spoken, That sorrow can ne'er set right." L. M. DURFEE. Syracuse, Kas.

The Seven Moons of Sonoma. Sonoma valley, in Sonoma county, Cal.,

is, in one respect at least, one of the most remarkable spots on the continent. It is the only place in America where the moon may be seen to rise and set seven times in one evening. The Indians gave the valley the name it bears away back in the misty past, and many have been the explanations offered by the white man account, for it. Even a slight acquainance with the language spoken by the original inhabitants of the valley teaches one that when the word Sonoma is attached the whole phrase means "Valley of the Moon." But why does this natural sink have Luna's other name attached to it? That was the question asked and left unanswered for many years, even though the phenomenon which had caused the observant red man to give the valley its name was regularly witnessed and admired. A year or two ago the editor of the Sonoma Index-Tribune visited the Indian who was supposed to be between 100 and 150 years old. In course of the conversation the old Indian stated that the reason the valley was called Sonoma was because it had "heap muchee moon," meaning many moons. Then he told how between the town of Sonoma and a certain peak the moon, when full, can be seen to rise seven times in succession in one evening, owing to the peculiar formation of the mountains. This oddity was noticed centuries ago by the Indians, who, on that account, called the depression "The Valley of Many Moons." - St. Louis Republic.

"No 'nice clean office' can ever furnish the resources of farm life," says one who has tried both. "The farmer's boy has enjoyments that only the millionaires of the city can afford. After spending his life in a city office, he says: 'If I had my life to live over again, I would stick to the

To live merely for one's self is to live to little purpose.

The girl should learn to bake bread before she receives a beau.

Not a Miracle, Now.

Until recently Consumption was considered incurable, but now people are beginning to realize that the disease is not incurable. The cure of Consumption is not a miracle, now. Dr. Pierce's Golden Medical Discovery will cure it, if taken in time and given a fair trial. This world-renowned remedy will not make new lungs, but it will restore diseased ones to a healthy state when other means have failed. Thousands gratefully testify to this. It is the most potent tonic, or strength-restorer, alterative, or blood-cleanser, and nutritive, or fiesh-builder, known to medical science. For Weak Lungs, Spitting of Blood, "Liver Complaint," and Dyspepsia, or Indigestion, it is an unequaled remedy. beginning to realize that the disease is

The Houng Folks.

The Apple Tree in the Lane.

I stood close by where on leathern hinge
The gate swung back from the grassy lane,
When the cows came home, and the dusky eve
Its mantle threw over hill and plain.
Its branches, knotty and gnarled by time,
Waved to and fro in the idle breeze,
When the spring days wove a blushing crown
Of blossoms bright for the apple trees.

Its shadow fell o'er the crystal stream
That all the long bright summer days,
Like a sliver thread, 'mid the waving grass,
Reflected back the golden rays
Of the noonday sun that madly strove
To drink the fount of the brooklet dry,
But the light clouds showered teardrops dow
Till the glad brook laughed as it glided by.

Never were apples half so sweet,
Golden russet striped with red,
As those that fell on the yleiding turf
When she shook the branches overhead.
A trysting place for youthful friends
Was the apple tree in the days of yore,
And oft we've sat beneath its shade
And talked bright dreams of the future o'er.

And when the warm October sun
Shone on the maple's scarlet robe,
We gathered apples sound and fair,
And round as our own mystic globe.
The stately hemiock crowns the hill,
The dark pines rise above the plain—
But the one we prized far more than they—
The apple tree in the pasture lane.

Long years have passed, and cows no more
Come home at night thro' the grassy lane—
Where the gate swung back on leathern hinge
I stand and gaze on the far-off plain;
No more we list to the music low
Of the crystal stream as it ripples on,
And the apple tree in the pasture lane
Is but a dream of the days bygone.

THE NAMES OF COINS.

Interesting Information About Money of Different Countries.

The florin, one of the most famous of modern coins, originated in Florence. Some say that it gave the name to the city, while others assert that it was first so called because it had on it a fleur de lis, from the Italian florone, or "flower," for the same reason that an English silver piece is called a "crown," or certain gold pieces in France indifferently a "Napoleon" or a "Louis," or the \$10-gold-piece in America an "eagle."

For several hundred years, and down to a comparatively recent date, money was coined at from twenty-five to thirty different cities in France that had inherited the privilege. Now all French money is coined at the Paris mint.

Few French gold pieces are, however, in circulation except those bearing the head of Napoleon III., and silver pieces of the same coinage are almost as common. French silver coins wear admirably, and pieces of the reign of Charles X., Louis XVIII. and Napoleon I., are very common.

The standard coins on the continent are: In France, the franc; in Spain, the peseta; in Italy, the lira; in Holland and Austria, the florin; in Germany, the mark; in Russia, the ruble.

Belgium and Switzerland use the French name for the piece of twenty sous. Each of these pieces is, like the American dollar, divided into 100 parts, called kopeck in Russia, pfennig in Germany, kreutzer in Austria, cent in Holland, and in Italy, France and Spain by the word meaning hundredth.

The word shilling is of German derivation, like penny, which comes from the German "pfennig." The word "crown" comes from the image placed on the coin. The name franc was given by King John, who first coined these pieces in 1360.

They bore the motto "Le Rol Frank" (King of the Franks) and were of two kinds, one representing the king on horseback, the other on foot.

The franc was formerly also called livre (pound), though the connection with any special weight is not evident. The name of the German coin, mark, meaning a weight of eight ounces, was formerly in general use in Europe.

The name of the Italian coin that corresponds with the franc (lira) also means pound. The coins in present use in Spain have their names from other sources. The five-peseta piece, which corresponds with the American dollar, is called escudo

"Peseta," the name of the small coin representing the monetary standard, means simply "little piece." "Ruble" is from the word meaning "to cut," and was so called because originally the coin was

silver mining city or district in northern Bohemia called Joachimsthal, or Joachim's valley.

The reigning duke of the region authorized this city in the sixteenth century to coin a silver piece which was called "Joachimthaler." The word "joachim" was soon dropped, and the name "thaler" only retained.

The piece went into general use in Germany and Denmark, where the orthography was changed to "daler," whence it came into English, and was adopted by the Americans with still further change in the spelling. The Mexican dollar is generally called "piastre" in France, and the name is sometimes applied to the United States dollar.

The appellation is incorrect in either case, for the word plaster or plastre has for the last fifty years been only applied with correctness to a small silver coin used in Turkey or Egypt, which is worth from 5 to 8 cents.-New York Home

A Hero of Duty.

In the north of Holland, over an extent of three leagues, the country is not protected from the incursions of the sea by any natural barrier. Some two hundred years ago the Dutch undertook the gigantic task of erecting enormous dykes of granite blocks and clay to resist the force of their terrible invader. Behind this shelter numerous villages arose, and flourish to the present day. Alkmond in particular, which numbers 10,000 inhabitants, is built little below the dyke, which is kept in constant repair by two hundred workmen, under the direction of an engineer. One afternoon in November. about a century ago, a furious wind was blowing from the northwest, increasing every moment. The engineer in charge was a young man engaged to be married. whose friends and family lived at Amsterdam. He was to go to Amsterdam that very evening to join in a great festival, long looked forward to and eagerly desired. His preparations were all made and he wa in high spirits, just ready to set out. Suddenly the sound of the rising wind struck upon his ear, and he remembered with a pang of anxiety that it wasthe time of the high tides. He thought of his dyke and all that depended on it. It would be a dreadful disappointment not to go. But the dyke! His friends would be all expecting him; watching for him. What would they think? But the dyke. There was a fierce conflict between inclination and duty. It is six o'clock. The sea is rising. But at seven he must set out for Amsterdam. Shall he go? His heart says yes; duty says no. Again he looks at the sea, watches the rising storm, and decides to remain at his post, then turns to the dyke. It is a scene of the utmost confusion. His two hundred men are aghast, bewildered. The storm has become a hurricane. The supply of tow and mortar is exhausted. They are at their wits' end to know how to repair the breaches-how to defend the place against the terrible enemy, who is every moment gaining upon them. But as soon as the young engineer appears a joyous cry bursts from every breast.

"Here is the master! God be praised; now all will be well." The master places each workman at his post and a desperate battle begins between man and the terrible ocean. At half-past eleven there is a cry from the center:

"Help! help!"

"What is the matter?"

"Four stones carried away at a blow!"

"Where is that?" "Here to the left!"

The master does not lose a moment. He fastens a rope around his body: four workmen do the same, and forty arms seize the ropes, while the five brave fellows throw themselves into the waves to repair the damage. The mad waves struggle with them, dash them about, blind

gle with them, dash them about, blind them. No matter; they do their duty and then they are hauled on land again.

But the cry, "Help! help!" soon arises from all parts.

"Stones!" cries one.

"There is no more."

"Mortar!"

"There is no more."

"Take off your clothes!" cries the master, tearing off his own; "stop up the holes with them!"

Whet will man not do for a noble leader

with them!"
What will men not do for a noble leader in a great cause? Cheerfully, without a murmur, straining every nerve, the gallant two hundred toil on half naked, exposed to all the fury of a November tempest. It wants a quarter to midnight. A few inches more and the sea will have burst about 300 years ago. There is a little



the defenseless country. To-morrow there will not be a living soul in these flourishing villages. The clothes are all used up; but the danger increases; the tide will rise till midnight. "Now, my men," said the clear, thrilling voice of the master, "we can do nothing more. On your knees, all of you, and let us each cry mightily to God for help." And there in the midnight darkness, on the dyke. which shook and trembled beneath the fury of the tempest, the brave two hundred knelt, lifting their hands and their hearts to Him who can say to the waves: "Peace be still." As upon the sea of Galilee, so now He heard His children cry, and delivered them in their distress. Meanwhile the people of Alkmond ate and drank, sang and danced, little thinking that there was but a few inches of mason-work between them and death. Thousands of lives had been saved because one man had done his duty.—Mid-Continent. Continent.

ears Soap

It is a wonderful soap that takes hold quick and does no harm.

No harm! It leaves the skin soft like a baby's; no alkali in it, nothing but soap.

The harm is done by alkali. Still more harm is done by not washing. So, bad soap is better than none.

What is bad soap? Imperfectly made; the fat and alkali not well balanced or not combined.

What is good soap? Pears' ..

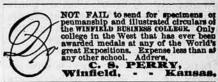
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Annual cards in the Breeders' Directory, consisting of four lines or less, for \$15.00 per year, including a copy of the Kansas Farmer free.

Electros must have metal base.

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

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

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

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

Address all orders

KANSAS FARMER CO., Topeka, Kas.

KANSAS FARMER CO., Topeka, Kas.

The United States Department of Agriculture investigation of food adulterations leads to the conclusion that about \$700,000,000 is paid annually for materials under the supposition that the articles bought are something different from what they really are. Most of the adulterations are not positively harmful, but are put in to cheapen the articles. Manufacturers do not call them adulterations, but dignify them as "streaks of economy."

India is the country which is now reporting famine. Where populations are such that production but little exceeds consumption, a crop slightly below the average pinches the poorer people. If crop failures are considerable, famine and suffering are inevitable. Great density of population is desirable only where the intelligence with which productive capabilities are used renders the production of ample food and other supplies reasonably

In our Horticultural department will be found this week a most interesting account of experiments in "breeding" tomatoes. The experimenter seems to have hit upon a plan by which to shorten the period required for the development of plants and their fruits. A more important discovery can scarcely be made, and while the limitations of its application have not been determined, sufficient is known to indicate that great and valuable modifications may be made by varying the time of selecting seed.

While from some sections the reports of condition of the wheat crop are not altogether favorable, yet the generally favorable weather of the spring and summer has brought the average condition to such a state that the aggregate crop of .the country may be expected to vary but little from that of 1891. It is not to be expected that the phenomenal foreign demand of last year will be repeated in 1892, and it is States Supreme court, held that rates one of the serious questions which will obtain remunerative prices for our grain?"

The reports of foreign agricultural papers indicate that machines for milking cows have so far progressed that rival patentees are litigating with each other as to their respective claims. Both machines operate on the same plan of sucking the milk from the udder by means of a partial vacuum, and involve the use of some mechanical power to produce the vacuum. This is, however, simply arranged, and the work may, perhaps, be most readily done by the use of water raised by a windmill. So far the machines do not milk the cows clean, and must be followed by a careful milker. Perhaps further improvements will enable this, like many other machines, to do its work companies the power, by excessive issue better than it can possibly be done by

RAILROAD ASSESSMENT AGAIN.

In the KANSAS FARMER of June 8, appeared a review of a circular letter recently published by the State Board of Railroad Assessors. This circular sought to explain and justify the enormous reduction made last year in the valuation of the railroad property of the State. The KANSAS FARMER review showed that, far from a satisfactory explanation, the circular was mere pettifogging and demagogy misleading and untrue in statement, and wrong in conclusion. No attempt has been made to answer this review, and its unchallenged showing may therefore be taken as admitted.

It is not for the purpose of needlessly prolonging a controversy, nor for the purpose of placing any officer of the State, or citizen of Kansas, in an unfavorable light, but because of other attempts to justify the outrage perpetrated in reducing the assessment of railroads below what is just and right, that the KANSAS FARMER again takes up the subject. And, since the assessment of 1892 is made by the same board that made the unfair reduction, and since the members of that board seek to justify the reduction, some of them even insisting that the railroad assessment is still too high, and since some members of the board seek re-election, it is a matter of grave public importance on which to keep silence would be to assist in wronging the people of Kansas.

The Atchison Champion, of June 25, made a feeble and disconnected attempt to justify the reduction, and to explain why two members of the board in 1890 voted to raise the valuation, and in 1891 voted for the immense reductions. That these high officials should plead the "baby act" in justification of their contradictory votes illustrates the extremity of their case. That these youths who have worn beards on their faces for the last thirty years passed their adolescence between 1890 and 1891 appears to have been of greater advantage to Kansas railroads than to other Kansas taxpayers, and may be an argument against the retention of men in official positions during very long

The Champion, edited by Lieutenant Governor Felt, President of the Railroad Assessors, and one of those who voted to raise the assessment in 1890, and to reduce it in 1891, says:

"In 1890 the board had before it the sworn returns of the railway companies, but not the vouchers and original bills showing the actual cost of the property."

Does Mr. Felt want his readers to infer that the railroad companies were so callow that in 1890 they overstated the valuation of their properties, and deceived the board into so assessing them as to saddle upon themselves a quarter of a million dollars more taxes than they ought to pay? The taxpayers of Kansas are not so callow as to be so misied. Railroad companies are not to be accused of swearing falsely to their own hurt, and the valuation of 1890 made on the sworn returns mentioned by the Champion was not too high.

The Railroad Assessors have not in all their defense given to the public the details of the cost of the property assessed. But fortunately there is another board in Kansas which publishes reports of the cost of railroad property, viz., the Railroad Commissioners. In the report of this board for 1890, pages xi, xix, xx, xxii and xxiii in the discussion of rates occurs the following:

"A learned Judge of the United States Circuit court, now a Justice of the United could not be lawfully reduced by State soon press for an answer, "How shall we authority below a point of earning capacity equal to the cost of operation, maintenance, payment of interest on debt, and a reasonable dividend on capital

stock. * * * "It is true, in the case quoted from, the question of whether the capital stock, or any considerable part of it, of railroads before the court, represented actual investment in railroad property, or what is usually termed 'water,' was not suggested; and in the absence of any proof upon that question, the laying down of such a rule must be understood to have reference to stock representing actual investment.

* * * To interpret it as applying to all stocks, irrespective of the conditions of their issuance, would result in the placing in the hands of railroad of stock, to reduce the power of legislation over the subject-matter of the rates

minimum. * *

of road upon that portion of Kansas mile-

"The amount of bonded debt per mile

age that lies within the State is \$21,-674.37. * * *

"The average net earnings for the year 1889 upon this amount of capital, represented by the bond debt alone of the roads were 41/4 per cent., or, in exact figures.

1 234 per cent. * *

"The total operating and miscellaneous expenses, taxes and rentals for the year ending June 30, 1890, were \$95,104,964; net earnings from operations, \$32,318,632. This amounts to 4.582 per cent. on the total bonded indebtedness alone. * * The percentage of net income from all sources, 1890, to bonded indebtedness, was 5.73 per cent."

On page xlv of said report the total cost of construction and equipment of roads in Kansas is shown to be \$41,168 per mile. For some reason not explained this last showing is omitted from the Railroad Commissioners' report for 1891.

The above quotations show that the people of Kansas are paying an income on the cost of the roads; that the Railroad Commissioners have been careful to get at the actual cost; that these roads paid larger average dividends in 1890 than in 1889, so that their value must have been at least as great March 1, 1891, as March 1, 1890, and that the actual cost of the property was \$41,168 per mile.

The Railroad Assessors are not so verdant as to suggest that a purchaser could acquire these properties free of incumbrance with all their terminal facilities, control of traffic, franchises, donations, etc., etc., for an average of \$41,158 per mile. But assuming that they are worth no more than this sum, and dividing this by four to get at the usual basis for assessment, and we have the sum of \$10,292 per mile against the \$5,745.02, to which the board reduced the valuation. Indeed the assessed valuation of railroads in the neighboring State of Missouri is admitted by a defender of the board to be \$10,695 per mile.

The KANSAS FARMER has nothing to do with whatever politics there may be in. this discussion, but it will not keep quiet when public officials try by the methods of the demagogue to justify and perpetuate an outrage upon the people of Kansas to the amount of \$250,000.

ANTI-OPTION BILL IN DANGER.

A most determined fight in the interest of those who profit by gambling in prices of farm products is being made by the organizations of these gamblers. They do not scruple to publish their plans and their reasons for them, and to assert what is to be done by officials in high places. The National Provisioner, of New York, in its issue of June 25, says: "The members of the exchanges whose business will be affected by the bill in case it becomes a law should actively agitate the question among their friends and fellow members, and should get some one to telegraph to the representatives of their State in the United States Senate asking them to vote against the passage of the bill. It is a surprise to us that so many conservative Senators should be in favor of passing this bill in the face of the protests of so many exchanges and merchants of standing, and we can only believe that politics again clouds their views. We hope that when the bill is put to the vote the majority of the members of the Senate will have the welfare of our merchants more at heart than any mere hope of political advantage, and we should be much mistaken if the contrary were the case. It seems almost as if the Senate intended to throw the responsibility for making the bill a law or vetoing it upon the President. If this were the case it would be the opportunity of his life, and would do him more good in the struggle for his re-election than any of the preceding blunders of his opponents have done for him so far. Should the bill reach him at all he will veto it."

The coolness and confidence of the Provisioner's prediction should assure its readers that this journal knows what it is talking about.

Having defeated for the present Congress the proposition to restore the free coinage of silver, the monometallists are at a loss to account for the late movement of gold abroad in the face of the large trade balance in favor of this country.

of these companies to an unimportant | MONOMETALLISTS' POSITIONS OUES-TIONED.

It has been customary for a long time in this country to accept as conclusive every statement as to facts of finance made by Senator Sherman, of Ohio. Any conclusions reached by the venerable Senator, have been, by a large proportion of the people, accepted as beyond further controversy. But in these days of general inquiry on financial and other economic questions, even John Sherman has been challenged as to the accuracy of his statements, both as to fact and conclusion. Mr. St. John, President of the Mercantile National Bank, of New York, joins issue, not only with Senator Sherman, but with others who echo his views. The Reform Club of New York had, as mentioned by Senator Morgan in a recent speech, announced that:

"Free coinage of silver would not give the American farmer a single new customer or increase the demand for American labor; would not add a dollar, therefore, to the income of either; would debase the currency and thus effect practical repudiation of a part of every debt; * * * would hamper foreigh commerce and thus lessen our agricultural exports."

To which Mr. St. John, in a paper read before the Western Commercial Congress at Kansas City, in April, 1891, replied:

"Directly to the contrary is the report of the British financial secretary to India under date of Calcutta, November 24, 1885. According to this no mean authority the value of England's foreign trade during ten years ending 1884, measured in her standard money, decreased about six-tenths per cent.; while British India's foreign trade increased, as measured in her standard, by over 571/2 per cent. for the same ten years. While the average price of wheat in India fell 1.7 per cent. measured in silver, the average London price of wheat had fallen 19.7 per cent. in 1882-1884, as compared with the average of the preceding twenty-one years. "If the figures of 1885 were compared with those of the period of 1861-1881 the contrast would be still more striking." An average decline of 40 cents per bushel in the London price of wheat, with 6 cents increase of the price in India, with similar comparative conditions of price for cotton, would appear to explain the great increase of 571/2 per cent. in India's foreign trade.

"But a second, perhaps not to be despised, authority is President Cleveland's Secretary of the Treasury. While "respectfully recommending to the wisdom of Congress [in 1886] the unconditional repeal of the [silver coinage] act of February 28, 1878," as his notion of the means "to compel an international redress of the monetary dislocation," i. e., by our act, further reducing the cost to trading England of her imported bread, compel her to share our burden of the \$60,000,000 silver which we annually produce—Secretary Manning solemnly averred:

"It is a direct consequence of the monetary dislocation that wheat of India, which there fetched 3 rupees per quintal fourteen years ago, and there fetches 3 rupees per quintal to-day, can be sold [profitably] in London (cost of transport apart) for as little as the gold price of 3 rupees in London to-day—a fall of 25 per cent. This lowered price of wheat in London has had to be met by a lower price of the American wheat in London. * * * The price of our surplus wheat determines the price of the whole wheat crop of the United States. So that the monetary dislocation has already cost our farming population, who number nearly one-half the total population of the United States, an almost incomputable sum, a loss of millions upon millions of dollars every year."

In reference to Mr. Sherman's objections to free coinage, Mr. St. John quotes the following from a speech of the Senator on the 13th of January, 1891—several extracts which he answers seriatim, as fol-

"I shall only cite the example in our own country. * * * In 1792 gold was undervalued by the legal relation of 15 of silver to 1 of gold * * * that slight deflection from the standard adopted only three or four years afterward by the French Government demonstized gold. * * Gold was demonetized. There was none of it in the country. The history of the country shows that."

Says Mr. St. John: "On the contrary, according to the records from the founding of the mint in 1793, during thirty years the sum of silver coined; and during ten years following, to 1833, the coinage of gold exceeded half the sum of gold coined during the thirty years before."

MUCH ALIKE.

As an observer of passing events in which the public has an interest, the KANSAS FARMER remarks the great similarity of the platforms recently adopted by the Republican and the Democratic parties. The points of contention between the parties seem to have almost disappeared. Some one asked Mr. Whitney, who was the chief manager of Mr. Cleveland's interests at Chicago, in what respect the Democratic silver plank differed from the Republican. "In none that I know of," Mr. Whitney is said to have replied, "but cur resolution reads

On the tariff question, which has been the chief contention of recent years, the similarity of declaration is not so apparent. But, on this, each declares for a tariff; neither finds the revenue from this and all other sources greater than its Congress finds ready means to dispose of by appropriations, and the difference in declarations as well as that developed by debates in and out of Congress, shows the contention to be one of schedules chiefly. It has been conceded, however, that the Republican platform with Harrison as the nominee of the party signifies an adherence to the idea of protection to American industries; and it was expected that the placing of Cleveland on whatever platform the Democratic convention might adopt, would be open only to the construction of favoring "tariff for revenue only." But, strangely enough, Mr. Vilas, who was conceded to be Cleveland's representative on the platform committee, insisted on a resolution demanding substantially that the tariff be based on the difference of wages at home and abroad, and the tariff plank was so reported to the convention. But that body would not have it so and substituted a resolution favoring a tariff for revenue only. But the convention nominated Cleveland, who is known to be perverse in going his own way, and while, had the Vilas resolution been adopted without controversey, the nomination of Cleveland would have given a "tariff for revenue only" interpretation to the platform, the circumstances of the controversy, the advocacy of a protective tariff by Cleveland's recognized representative, and the subsequent placing of Cleveland upon the platform as its interpreter, gives it a meaning scarcely different from that of the central idea of the Republican "tariff for protection" plank.

JOINT DISCUSSION DECLINED.

Ex-Governor Geo. T. Anthony, Republican candidate for Congressman-at-large, has published a letter in reply to a challenge to a joint debate of the silver question, in which he sets forth in plain terms the fact that joint discussions have very little influence on the opinions of voters. It is notoriously true that the tricks of oratory are, in joint debates, accompanied instruct the stock-raisers of the mother by tricks of committees of arrangement, by 'cheering" and "hissing" brigades, until the methods pursued are scarcely more honorable than those of the shouting of many national conventions.

Better than joint discussions is for each party to hold its meetings at which its views are presented by to all who care to hear them.

ARTESIAN WELLS FOR IRRIGATION.

Census bulletin No. 193 is devoted to artesian wells on farms, especially as used for irrigation. The total number of artesian wells on farms in June, 1890, in the States and Territories forming the Western half of the United States, was 8,097, representing an estimated aggregate investment of \$1,988,461.26. Complete statistics, concerning the depth, cost, discharge and other features of 2,971 of such wells, fairly distributed through the various States and counties from which they are reported, have been obtained from the owners, and from the averages derived from such statistics the number of artesian wells used for irrigation is computed at 3,930, the average depth per well 210.41 feet, the average cost per well \$245.58, the total discharge of water per minute 440,719.71 gallons, or 54.43 gallons those now counted upon would be neces- keep the hair a natural color.

to 1823, the coinage of gold exceeded half per well per minute, the average area irrigated per well 13 21 acres, and average cost of water per acre irrigated \$18.55. Over one-half of these wells are in the State of California, where 38,378 acres of agricultural land were irrigated by artesian water. Utah stands second in the number of artesian wells used for irrigation purposes, and Colorado in the area thus irrigated, followed, at a long distance, by Texas and other States, as set forth in the bulletin.

KANSAS WEATHER-OROP BULLETIN.

Bulletin of the Weather Service of the Kansas State Board of Agriculture, in co-operation with the United States Weather Bureau, for the week ending June 27th, 1892:

Little or no rain has fallen in the State this week, except in the extreme western and northwestern counties. Light rains have fallen from Sherman to Phillips, and from Greeley to Ellis, with heavier rains from Wallace to Trego, being heaviest in Gove, where it amounts to 1.25 of an inch. A fair rain is reported from the southern portion of Chautauqua. Some hail in scattered portions of the west, but no damage is reported.

The temperature for the week was above the average in all portions of the State, except in the extreme western counties, where it was about the normal. The first five days were unusually warm, reaching the maximum on the 22d, when it reg-95° at the Central Station, also at Klowa, 98° at Independence, 99° at Norton, 100° at Gibson, and 103° at Tribune; it then fell, reaching the minimum for the wack on the 25th, recording 64° at the Central Station, 63° at Klowa, and 60° at Gibson. The sunshine has been about normal in the western half of the State, but excessive in the eastern.

The weather has been very favorable

for the wheat harvest, which is now in progress throughout the southern third of he State, while the early wheat harvest has begun in the central counties. Wheat is in the milk stage in the northern counties. The rye harvest is progressing through the southern half of the State; rye and wheat both proving excellent. Threshing begins the coming week in the south. Oats are improving. Oats are all headed out in the central and southern counties and are heading in the northern. The oat harvest will begin this week in the southern counties. The oat straw is still short in the central counties of the eastern division, though a number of fields have come surprisingly forward. Corn has improved more rapidly than any other crop and is making a rapid growth. The corn fields are now, generally, quite clean, and much of the corn in the central and southern counties has been laid by. Crops injured by hail in May have about fully recovered and are now making rapid strides. Flax is failing in many fields in the southeastern counties on account of the crust formed after the heavy rains and the dry weather following. Flax is doing well in Coffey, in which county apples are also promising a fair crop.

Kansas farmers are not all invited to country, but the Leavenworth Times gives the following explanation of the visit of one of our farmers to England: "A few years ago Col. W. A. Harris sold to mobs which form so conspicuous a feature | English stock-raisers some of his blooded cattle. They were taken to England and their increase has proved to be better than any other cattle produced in the British islands. So greatly pleased are the English with them that they sent for Col. Harris to come to England to lecture before an agricultural society upon stock-breeding and raising, for which they agreed to pay him sufficient to cover the expenses of the trip."

Henry Clews, the Wall street broker, writes: "The outlook for sound currency legislation has been cleared by the nomination of Mr. H rrison as the Republican candidate for the Presidency and Mr. Cleveland as the Democratic candidate. Whichever of these candidates is successful next November the country will not only be saved a vast deal of anxiety concerning the silver craze, but the prospects are encouraging for the repeal of at least the worst f-atures in our present foolish The outsilver laws. look for the anti-option bill is uncertain. A canvass of the Senate shows that only a

sary to kill the measure in the Senate. There seems to be a fair possibility of blotting out this silly legislative effort. If the bill becomes a law, the control of our wheat and cotton markets would be immediately transferred to England, which is naturally a chronic bear upon all that she buys of us. Where the benefit of the anti-option bill would come in to the American farmer I fail to see. The intended beneficiary would be the worst of sufferers. President Harrison has not expressed himself on the subject, but I should be surprised should he fail in veto-

The Father of History.

Every book lover knows something of Herodotus, the "Father of History," and most people would like to know more. The old sage has few equals, even in modern times, in telling an interesting story. There are few romances so captivating as his stories of Crossus, Cyrus, Scythia, Marathon and Salamis. Of course few readers ever expect to own Herodotus' complete works, or would even care to read them entire. But here is a handsome little volume, published by John B. Alden, New York, in his series of "Ancient Classics for English Readers," a book of 167 pages, choice type, paper, printing and fine cloth binding, which gives the "gist" of Herodotus, by a classical scholar of the highest standing, and which every lover of the classics will delight in. By special arrangement with Mr. Alden, we are able to offer subscription to KANSAS FARMER, one year, and the above described book, "Herodotus," for \$1.20. We trust our old friends, as well as new ones, will take advantage of this offer and send in at once, as this item will not appear again, though the offer stands good till November 1. Send dollar bill and 20 cents in 2-cent postage stamps, or postal note for \$1.20, if convenient.

Publishers' Paragraphs.

Summers, Morrison & Co., 174 S. Water street, Chicago, will send their Daily Trade Bulletin to any one having produce, vegetables or wool to market. They are doing a specially good business in wool and have the reputation of getting highest prices and making quick sales.

Gamble's celebrated draft equalizers for binders-the No. 3 style-it seems, is the thing long needed. Four horses can be used without the slightest side-draft. Horses turn the machine by direct draft. Four medium-weight horses will run all day without changing. Works smoothly and with ease. Our Chicago manager states that the Des Moines Equalizer Co., of Des Moines, Ia., are selling any quantity of these equalizers, and in every case they are giving the very best of satisfaction.

Hapgood Plow Co, of Alton, Ill., desire to secure an agent in every Alliance and township to take orders for their agricultural implements. This ought to be a chance for energetic men everywhere to enter upon a business which would be lucrative and yet no capital required. See their advertisement elsewhere in this issue. Their riding and walking plows are highly recommended wherever used, and any farmer desiring to purchase a good implement will do well to write the firm for their catalogue.

Farmers are nearing the hay harvesting season and the prospect for a good crop is very general. Doubtless many are wondering what they will do with it. The great cities are affording a splendid market for surplus hay, and Chicago consumes a wonderful amount of it. One of the leading hay commission houses of Chicago is M. M. Freeman & Co. Their office is 14-16 Pacific avenue, and they, no doubt, handle more hay than any other concern in the city. They issue reports giving an exact status of the market, and shippers are kept posted of the "supply and demand" each day. Put yourself in communication with them and get these daily

In southern Kansas it is not unusual for the wheat-grower to list broomcorn on wheat land immediately after harvest. If the season is favorable this makes a second crop of considerable value.

Hall's Hair Renewer enjoys the confidence and patronage of people all over the few more negative votes in addition to civilized world who use it to restore and

The Exceeding Hot Weather

of the present summer is producing an alarming fatality from diarrhœa, cholera infantum, cholera morbus and dysentery. Every family and person ought to be provided with an effective preventive and cure for these diseases. Pe-ru-na never fails when used in time to cure the most severe cases of them. Thousands of lives are saved by this unfailing remedy in all acute diseases of the stomach and bowels. If you are not already acquainted with the wonderful virtues of Pe-ru-na in summer complaints, send for three lectures by Dr. S. B. Hartman, of Columbus, Ohio, on acute diseases of the abdomen, which contain a description of the causes, symptoms and cure of these dangerous and prevalent diseases. The lectures sent free to any address by the Pe-ru-na Drag Manufacturing Co., Columbus, O.

Don't Be Deceived

by dealers who "cut" prices. "Cutting" prices leads to "cutting" goods. For this reason and to protect the public, the genuine medicines of Dr. R. V. Pierce are now sold only through regularly authorized agents, who can sell only at the following long-established prices:

Dr. Pierce's Golden Medical Discovery (for the liver, blood and lungs), \$1.00 per bottle.

Dr. Pierce's Favorite Prescription (for woman's weaknesses and derangements), \$1.00 per bottle.

Dr. Pierce's Pleasant Pellets (for the liver), 25 cents per vial.

The genuine medicines, which can be had only at these prices, are the cheapest remedies you can use, for they're guaranteed. It's "value received or no pay." In every case where Dr. Pierce's medicines fail to give satisfaction, the makers will return the money. But, they want to be sure that you get their medicines, and not their bottles refilled or tampered with, or spurious imitations.

Refuse everything offered as Dr. Pierce's medicines at less than the above prices. They are generally spurious.

Half Rates to Saratoga, N. Y., Via B. & O. R. R.

The Baltimore & Ohio railroad will sell tickets to Saratoga Springs, N. Y., on the occasion of the meeting of the National Educational Association, for one fare for the round trip. Tickets will be on sale July 5 to 7 inclusive, and will be valid to return until July 19 inclusive. All B & O. vestibuled express trains, with Pullman sleeping cars, pass through Washington. For full information as to rates, time of trains, and sleeping car accommodations apply to nearest B. & O. agent, or L. S. Allen, Ass't Gen. Pass. Agent, The Rookery, Chicago.

Low Rates to New York and Return.

The Baltimore & Ohio Railroad Company will sell excurs on tickets from Chicago to New York and return at rate of \$16 for the round trip for all through trains leaving Chicago July 5 to 7, inclusive. The tickets will be valid for return journey until August 15, and will be good for stopover at Deer Park, the famous mountain resort on the summit of the Alleghanies, and also at Washington city. Tickets to New York and return via B. & O. railroad will also be on sale at the offices of the principal railroads throughout the West.

For full information as to time of trains and sleeping car accommodations, apply to L. S. Allen, Ass't Gen. Pass. Agent, B. & O. railroad, The Rookery, Chicago.

Nature has decreed that, in of the country at least, it should be cold in winter; but she has generously provided for those who seek a milder climate. To the winter resorts of Texas, viz.: Austin, Houston, San Antonio, Rockport, Corpus Christi, Galveston, Lampasas and El Paso, and Deming, N. M., the Missouri, Kansas & Texas railway will, until April 30, sell at very low rates round-trip excursion tickets having a transit limit of thirty days in that direction, with a final limit to return until June 1, 1892, being good to stop off at all stations in the State of Texas within the transit limit of the ticket. This road will also sell at greatly reduced rates round-trip excursion tickets to California and Mexican points, limited to six months from date of sale, granting stop-overs both going and returning. For further information, call on or address Geo. A. McNutt, T. P. A., 619 Main St., Kansas City, Mo. W. G. Graham, Acting G. P. & T. A., Parsons, Kas.

E. B. Parker, Ass't G. P. A., 509 Chestnut St., St. Louis, Mo. and Deming, N. M., the Missouri, Kansas

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Borticusture.

A BREEDING EXPERIMENT WITH TOMATOES.

By E. S. Goff, of the Wisconsin Agricultural College.

The extent to which plants may be modified by selection of seed, is of interest both to the practical cultivator, and the man of science. Few systematic experiments upon this subject appear to have been reported. The one here given is not regarded as complete, but the results are thought of sufficient interest to merit presentation.

In the fall of 1883, seed was taken by the writer, then at the New York Agricultural Experiment Station at Geneva, from thoroughly mature fruits of the Cook's Favorite tomato, and at the same time from other fruits that showed no external indications of maturity. The latter fruits had nearly attained their full size, but had not commenced to change color toward ripeness. The following season (1884), plants were grown from both these selections of seed, and in the autumn, seeds were taken as before, t. c., from ripe fruits from the plants grown from ripe fruits, and from immature fruits from those grown from immature fruits. Plants were again grown from those grown from the two selections of seed in 1885, when seeds were again taken from the two strains as before, from which other plants were grown in 1886. From the latter crop, seeds were again saved, which were, however, not planted until the spring of 1889, when plants were grown from them at this station, and the two strains have been continued up to the present time. We have, therefore, one strain of the tomato grown through six generations from seeds known to be fully mature in every case, and another strain of the same variety, grown the same number of generations, from seeds taken from fruits that had not commenced to change color toward ripeness. The two strains have been grown side by side throughout the experiment. What has been the effect upon the plants?

The foliage and stems of ten plants grown from the ripe seed the past season, from which the fruit had all been picked, weighed on September 21, 149 pounds, while the same number from the immature seed weighed but 651/2 pounds. These ten plants from the ripe seed had matured up to September 12, 1,298 fruits, weighing 57,127.2 grammes, while the ten plants from the unripe seed had matured at the same time, 2,519 fruits, weighing 102,376.6 grammes.

But these differences are by no means the only ones apparent in the two strains. The use of immature seed has clearly tended to promote early maturity, though the degree to which this influence has been manifest has not been uniform in different seasons. The first season (1884), the plants from unripe seed matured their first fruit twenty days in advance of those from the ripe seed, and they had matured ten fruits ten days in advance of the latter. In 1885 the two strains ripened their first fruits on the same day, though the one from unripe seed matured ten fruits seven days in advance of the other. In 1886, and in 1889, the dates of first maturity were not noted. In 1890, the strain from immature seed ripened its first fruit eight days, and 1891 at least fourteen days in advance of the other. Dr. J. C. Arthur, who grew the two strains at the Indiana Experiment Station, in 1890, secured a greater earliness of three weeks from the immature seed. It thus appears that in the five trials in which the dates of first maturity were noted, the strain from unripe seed gave its first ripe fruit, on the average, 12.6 days earlier than the other

The size of the fruits has been reduced slightly with the use of immature seed. Thus the fruits from the unripe seed averaged in weight 40.64 grammes, while those from the mature fruits averaged 44.01 grammes.

The firmness of the fruit from the immature seed has been somewhat less than that from the ripe seed, the rind being slightly thinner. A somewhat greater tendency to ripen unevenly has also been manifest, the fruit often being found slightly green at the center, when appearing quite ripe externally.

In keeping quality, the fruit from the immature seed has generally been inferior directly to grass lands, and the grass in to that from the ripe seed, but the past turn applied to the stock, a combination season this difference scarcely appeared, is formed that will work harmoniously both strains having kept remarkably well i and profitably.

when picked from the plant. The fruit from the immature seed was, however, rather more subject to decay when left on the vines, and has always shown a greater tendency to crack after rain.

The form of the fruit has been very perceptibly affected, being rendered more oblate. Thus in forty typical fruits from the ripe seed measured the past season, the axial diameter was to the transverse diameter as 1 to 1.125, while in the same number from the unripe seed, it was as 1 to 1.313. Similar differences were noted in previous years.

The number of cells appears to have been affected. The forty typical fruits noted above from the ripe seed contained a total of 97 cells, while those from the unripe seed contained a total of 128 cells. A similar difference was noted by Dr. Arthur in 1890.

The tendency of the fruit to grow double has increased with the use of immature seed. In the yield of ten plants from the mature seed, only 21/2 per cent. of the fruits that ripened between August 17 and September 19 were double; while in that of the same number from the immature seed, 8 per cent. were double. Similar differences have been noted in previous

The proportion of seed to the weight of the fruit appears to have been affected. Five typical fruits from mature seed contained 2.64 seeds to the gramme of fruit, while six typical fruits from the unripe seed contained 3.35 seeds per gramme.

The weight of the seed appears to have slightly increased with the use of immature seed. The seeds from the five typical fruits noted above, from the plants from ripe seed weighed 2.743 grammes per thousand, while those from the six fruits from unripe seed weighed 2.804 grammes per thousand. Another sample of seed from the mature seed strain weighed 2.323 grammes per thousand, and a second from the unripe seed strain weighed 2.787 grammes per thousand. It should be remembered that these seeds were all from mature fruits.

The posture of the plant seems to have been rendered more decumbent by the use of immature seed, a fact noticeable throughout the experiment.

The aspect of the foliage has been atfected in a conspicuous manner. The shade of color has been uniformly lighter in the plants from unripe seed, and the tendency to blight has been noticeably greater in this strain. The surface of the leaflets has also assumed a much more blistered appearance in the plants from immature seed, than in those from ripe seed.

The germinative power of the unripe seeds has been uniformly very low. In 1884, seeds from a very immature fruit vegetated but 2 per cent., while seeds from a ripe fruit in the same trial vegetated 96 per cent. The immature seeds planted in the spring of 1891, tested in the Seneva apparatus, showed a germination of 31 per cent., while the ripe seeds germinated 99.5 per cent. In three trials, the weight of the immature seed was found to be somewhat less than that of mature seed. This was true whether the mature seed came from a plant grown from ripe or unripe seed.

The percentages of water and of ash contained in the plants appear to have been affected, a decrease in the water content, and a corresponding increase of ash having been found in the plants from the unripe seed.

It may be added that there is no good evidence that the changes noted as accompanying the use of immature seed, or seed from the enfeebled plant tend to increase with each planting. But this has not been true of later plantings. Indeed, during the past two seasons, the strain from unripe seed has appeared to slightly increase in vigor.

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In the Dairy.

The Dairyman's Cow.

There are good cows in all breeds, including the native, but none of them will return a profit to their owners unless they are properly fed and cared for. A good cow will not respond in a good flow of rich milk if fed dry timothy hay, rotten cornstalks or straw, nor if forced to stand out and face blizzards and shiver on the lee side of a barbed wire fence. Such treatment and foods are for reduction and not production. We have seen herds of cows standing in the blinding storm, as if their owners were trying to find out by experiment which of them could stand the most abuse. Such treatment is expensive and costs cash in foods and butter fats. The owner cannot afford it. To do better will be to improve upon such barbarous treatment.

If a man does not know better in this age of improvements, books, farmers' institutes and agricultural papers, than to thus abuse his cows and waste his foods, he should learn better or go out of the dairy business. On stormy days every animal should be in a warm, comfortable stable, and be fed and watered there. The temperature of the cow's body is about 980, and it must be maintained with food and shelter. Such treatment of a cow as we saw meant excess of food. Again, milk of butter was the last-27 pounds 121 contains 87 per cent. water, showing the necessity of furnishing the cow that is giving milk all she will drink just when she needs it, and at a proper temperature, which should not be below 50°. Given ice water to drink, she must, to bring it to the temperature of her body, use some extra food to keep the fire burning inside to heat it-another loss to her owner, both in foods and butter fats. So then, if you are going to pursue such a system of care and feeding, it will not matter much which breed of cows you select.

If, on the contrary, you are going to join the procession of intelligent, progressive dairymen who are traveling in a better path and practicing a better way, buy a test and scale, then weigh and test the milk of each cow in your herd. The revelation will be a big surprise to you, as it has been to every man who has made the tests. You will find some of your cows which you thought were the best, the poorest in the herd, and vice versa. Test thoroughly, then weed out all that are getting trusted for their board and stable rent, and who will never pay you a cent for it all. Don't keep free cow boarding houses all winter and come out in the spring with empty hay mows and corn bins, and with nothing but a lot of half-starved cows and no cash to show for it.

Each cow has an individuality; develop this, and if it is high enough to pay a cash dividend, retain her; if she is losing money for you, turn her over to the butcher. The cow is a machine and should be kept for profit, not sentiment; for making the largest possible amount of butter, not the giving of a large amount of worthless milk. The manufacturer throws out the old, wornout machine and replaces it with another. He does not hesitate and say, "I cannot afford it," but on the contrary, "I cannot afford to do without it."-J. Powell, in Field and Farm.

Dairy Notes.

Butter floats better when cold water is mixed with the buttermilk.

It is estimated that six oleomargarine factories in Chicago displaced last year the product of 300,000 cows.

In England, the consumption of butter averages thirteen pounds annually for each man, woman and child.

The milk for calf feeding should be a little above blood heat. It will ol l always at night, at the same time taking

some before the calf finishes drinking. Be sure it is warm enough; cold milk

Milk should not be allowed to clabber before the cream is skimmed, as in this way a great deal of the cream is lost.

Persistent losing of health and flesh indicates that a cow is suffering from some ailment, and her milk should not

It has been shown by recent experiments that fresh cream butter is more apt to taste of the food given cows than when the cream is ripened.

A cow's simple cough may sometimes be cured by mixing a handful of whole flaxseed with wheat bran slops, and feeding it morning and night.

Summer butter is liable to have a cheesy taste. More thorough washing while in the granular state is needed. The first washing will barely harden the butter so that subsequent washings can cleanse it of its caseous elements.

Jersey breeders are rejoicing over another great annual butter record, this time by Signal's Lily Flagg. The cow is owned by Gon. S. H. Moore and Wm. E. Matthews, of Huntsville, Ala., and is reported as making 1,047 pounds 64 ounces of butter from June 1, 1891. to June 1, 1892. The largest yield of milk in one day was 50 pounds 4 ounces, and the largest yield of butter 4 pounds 101 ounces. The largest weekly yield

Impure blood is the cause of innumerable maladies. Hence, one of the greatest benefactions to humanity was the discovery of Ayer's Sarsaparilla, which, more than any other medicine, has saved America from becoming a nation of in-

The Poultry Hard.

Capons as Mothers.

EDITOR KANSAS FARMER:-A capon, besides being a very profitable fowl to raise, may be made very useful and easily earn his living by teaching him to bring up all your chickens and let the old hen go back to laying or setting.

It is not generally known, but it is a fact that capons, with a little training, make the best of mothers, taking most excellent care of twenty or thirty chicks at a time, and will keep at it all summer and get large and fat themselves. Being so much larger and stronger than a hen, they can do much more scratching for the chicks, and twice as many can live under them. The way to make them good mothers is as follows: When the capon has reached the age of nine months he is old enough to assume maternal duties. If you have chicks ready, catch the capon, and pluck a few feathers out of his breast, and at the same time switch him lightly with a cedar twig or anything that will sting him a little. The object of this is to cause his breast to itch. Put him in a dark box about two feet square and low enough to prevent his standing up. Then put two or three chicks in with him. He will probably kill those chicks, and when he does he should be taken out and switched again on his breast, after which he may be put back in the box and more chicks given him. And this time he will probably be glad to have them with him, as his breast will itch so that he will like to have the chicks huddle under him, and he will cluck to them eagerly, and treat them as kindly as an old hen. He should be kept under the box for twenty-four hours with the chicks, giving them a few bread crumbs and water. There should be just light enough for him to see the food and water, and care should be taken to have the capon far enough from the old hen to prevent the chicks from hearing her call for them. The next day he may be put in an open coop, and as many chicks given him as is desirable, where they should be kept for several days, after which he and the chicks may be allowed to roam where they choose, and the capon will take better care of the chicks than the mother, for he will never wean them. Other chicks

may be given him from time to time, but

Shipping Horses.

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and out for counterfeits There is but one genuine Better

ent out and have it to refer to

the chicks that are large enough from him. In this way one capon will bring up a great many chicks and the hen's time is not lost. The capon is always at home with a large family of chicks after he is once broken in. This is another inducement for the farmer and poultry-raiser to caponize.

I shall send printed questions and answers to any of your readers who may GEO. Q. Dow. wish them.

North Epping, N. H.

Hints in Season.

The drinking vessels should be filled with fresh water every morning, and all feed boxes should be kept perfectly clean.

Take good care of the young chicks, feeding generously on good, sound food, and as often as every two hours for the first ten days, giving bread crumbs mixed with hard-boiled eggs, after that cracked corn, and wheat and oaten grits, keeping them out of the wet grass in the morning until they are four weeks old; be careful to give only what will be eaten up clean each time.

If your young chicks are running with large fowls, make a covered slatted feeding place, about eighteen inches high, and place the slats so close that the large birds cannot get in; and your chicks will soon learn to go there for their food, and will suffer no annoyance from the other birds.

We again call the attention of our readers to the disease called roup; there are different stages of this pest of the poultry

Be careful to keep your birds from the wet and cold runs. Give chopped onions, charcoal twice a week. A little tincture of iron in the drinking vessels (one tea-spoonful to two quarts of water), and occasionally a little cayenne pepper, as a stimulant, will be useful.

The disease begins often with difficulty in breathing, then the nostrils become filled with mucus, the eyes and face become swelled, the throat fills with canker, and it becomes difficult to cure.

By following the above instructions, when you first discover it, in nine cases in ten it may be prevented and the bird saved. -Illustrated Journal of Agriculture.

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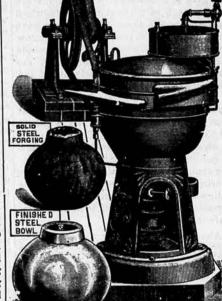
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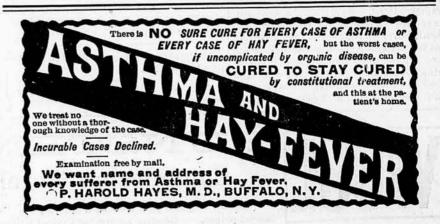
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OCULIST AND AURIST TO Kansas State Blind Ins itute, Kan-sas City, Kas. St. Joseph Orphan Asylum, Kansas City, Mo. Abundant references from pa-tients. Send for question blank.





The Apiary.

Edited by Rev. E. T. Abbott, St. Joseph, Mo., to whom all communications relating to this department should be addressed. Inclose a stamp if you desire a reply by letter. We invite questions and communications from any of the readers of the KANSAS FARMER who may be interested in bee culture.

Answers to Questions.

I see that the Atchison Champion says that Dr. — makes a hive the use of which will prevent bees from dying in the winter. What kind of a hive is it?

Answer .- I do not know what kind of a hive it is to which you refer, but no hive made will prevent bees from dying in the winter. Bees will winter just as well in one hive as another, if the conditions are right. Such talk about hives is indulged in simply to sell them. People who have investigated the matter thoroughly know there is nothing in it. It is only people who do not read the papers that are caught by such chaff. Nearly all of the so-called "devices" for wintering bees are a humbug, as is also much of the talk about the "winter problem." All that bees need to winter successfully is plenty of food in the right place. The right place is above the cluster; please remember this. A cake made of granulated sugar, weighing six or seven pounds, placed above the cluster after the bees cease to fly in the fall, will winter any colony. I have given directions in a former article how to prepare this sugar.

About how much honey will a swarm of bees need during the winter? Must I leave some in the super, or will they store enough in the brood frames?

Answer .- Do not leave any honey in the super, nor any empty sections. It depends on circumstances how much they will need, on the size of the colony, and the length of the winter. They may store enough in the brood frames and they may queens in learning. Let me say in conclunot. If you are not sure that they have plenty of honey, it is always best to provide against the possibility of their getting out of stores during the cold weather. See answer to question above.

What is the best way to introduce a

Answer.-Authorities differ on this subject, but I will give you the method which I have found the most satisfactory. To introduce a queen to a queenless colony which has no unsealed brood from which to rear queen cells, is very easy at any time when the bees are gathering honey rapidly. All that is necessary is to place the caged queen inside of the hive some place where the bees have access to her, so that they may become acquainted with each other. Two or three days is sufficient time for this. Of course you should see that the queen has plenty to eat during this time, as the bees in the hive might neglect her. Though a queenless colony will usually feed a caged queen from the start. After the bees have become acquainted, the queen may be released, as will be explained farther on.

Queens received from breeders or dealers will come to you in a cage, accompanied by a dozen or so bees. This cage generally has two or three departments, one of which is filled with candy. The bees and queen are expected to live upon this candy until they are released in a hive. The cage, when it reaches you, will be covered on one side with wire cloth over which will be tacked a thin board. As soon as you receive the cage, remove the board and tack it on again so that it will cover only the department that contains the candy. This will prevent the bees in the hive from eating up the candy through wire screen, but will leave the other part exposed, so that the bees may become acquainted with each other, as suggested above. After the cage is thus prepared, place it in the top of the hive, under the honey-board, or cloth that covers the frames, in such a way that the bees will have free access to it. Of course you should cover up the bees so that they will not become chilled if the weather is too cool. If you use a honey-board for coverering the frames, it will be better to take it off and cover them with a heavy cloth until the queen is introduced. After two

days, if the colony is queenless, as suggested above, remove the board that covers the candy and turn the wire screen back so that the bees in the hive will have free access to it. Be careful not to turn it so far back that the bees in the cage can get out. If the candy has been consumed, so that it does not stop up the opening, stick some comb honey in the opening to prevent the bees from coming out. Now cover up the frames carefully and shut your hive. Let it alone for two or three hours. At the end of that time the bees will have eaten out the candy or honey, released the queen, and she will be found upon the combs.

Most all authorities will agree as to the instructions given above when the colony is queenless and without brood. But when a queen is to be introduced to a colony that already has a living queen, then the authorities differ. Some, if not most of them, say that the colony should be made queenless forty-eight hours before beginning the process of introduction. My own experience is that it is better and safer not to have the colony queenless at all. When you receive the queen, proceed exactly as suggested above until you are ready to release the queen. Just before doing so, hunt out the old queen and remove her from the hive, and release the queen in the same way that you would if the colony had been queenless for weeks. By this method no time is lost and the colony will not be without a laying queen more than twenty-four hours. It may be well to say just here that no rules for introduction can be given that will relieve the operator entirely from the exexercise of good judgment and common sense. The way to learn how to introduce a queen successfully every time is to keep at it until you know how. However, the above hints may save you some loss of sion that I make it a point to examine a colony in an hour or so after the queen has been released, and if I find that they show any disposition to mistreat the new queen, I take my smoker and give them such a smoking as will take the fight all out of them.

The Beterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, Dr. S. C. Orr, Manhattan, Kas.

FISTULA.—I blistered my mare according to your instructions in Kansas Farmer of June 1, and when it came to a point I opened it. I have since been injecting a solution of sulphate of copper and it wants to close up. How long should it be kept open?

Garnett, Kas.

Answer.-Let it close up just as soon as you think it is all healed on the inside.

WIND-PUSF—COUGH.—(1) I have an eight-year-old mare that has what is called a wind-puff on the left forward leg just on the inside of the ankle bone. I used a liniment and checked the lameness but cannot reduce the swelling. (2) The same mare has had a deep cough for about a month but does not swell in the throat nor run at the nose. An answer through the KANSAS FARMER will be appreciated. Wanamaker, Kas. G. C.

Answer.-A fly blister may reduce th puff to some extent, but nothing will remove it entirely. If the mare is not lame the best way to do is to let it alone. (2) Give the mare a tablespoonful of the following powder in feed twice a day: Muriate of ammonia and nitrate of potash, of each, 3 ounces; gentian, Jamaica ginger and fœnugreek, of each, 2 ounces; mix.

"Animal odor" is generally due to the presence of filth.

Use a seed drill. It drops seeds more evenly than the hand can.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

June 27, 1892. CATTLE-Receipts, 6,624 cattle, 1,090 calves. The run of Texans was heavy. Native offerings were light. Dressed beef and shipping steers \$3 25@4 45; Texas steers, \$1 90@3 70; Texas cows, \$1 45@1 90; Texas heifers, \$1 25@2 25; Texas calves, \$4 50@6 50; Indian steers, \$1 70@ 3,00; Colorado steers, \$3 30; cows, \$1 25@3 00; helfers, \$2 25a2 75; stockers and feeders, \$2 90a

HOGS—Market unsteady. Pigs and lights, \$4 46@5 00. Representative sales, \$4 90@5 25 SHEEP—Receipts too large for the market. Texas muttons, \$3 95.

St. Louis.

June 27, 1892. June 27, 1892,
CATTLE — Receipts, 4,700. No natives. Texans lower. Native steers, common to best,
\$3 00@4 30; Texans, \$2 00@3 50.
HOGS—Receipts, 3,200. Market easier. Sales
were at \$4 75@5 25.
SHEEP—Receipts, 6,200, half of which were
through Texans, balance were stockers. Natives, clipped, \$4 50@5 00.

Chicago.

June 27, 1892.

CATTLE—Receipts, 15,000. Market averaged steady. One load averaging 1,602 pounds sold at \$4.75. Beef steers, \$3.004.75; stockers and feeders, \$2.203.75; bulls, \$1.75@3.00; cows, \$1.00@3.00; Texas steers, \$2.25@3.35.

HOGS—Receipts, 35,000. Market active and steady; closed firm. Mixed, \$4.96@5.30; heavy, \$4.90@5.40; light weights, \$4.90@5.50.

SHEEP—Receipts 8,000. Market was firm. Natives, \$2.00@6.00; lambs, per cwt., \$4.65@7.25. June 27, 1892

GRAIN AND PRODUCE MARKETS.

Kansas City. June 27, 1892. June 27, 1892.

WHEAT—Receipts for the past forty-eight hours, 95,506 bushels. Hard wheat in fair demand and steady; red wheat slow of sale. By sample on track: No. 2 hard, 65@66c; No. 3 hard, 61@64c; No. 4 hard, 58@61c; rejected, 504@59c; No. 2 red, 66@68c; No. 3 red, 60@64c. CORN—Receipts for past forty-eight hours, 57,000 bushels. Market irregular. More demand for white than for mixed. By sample on track: No. 2 mixed, 424@43c; No. 3 mixed, 424c; No. 3 white, 494@604c; No. 3 white, 4940.

49%c.
OATS—Receipts for past forty-eight hours,
10,000 bushels. Market slow and weak. By
sample on track: No 2 mixed, 28%@28c; No. 3
mixed, 28c; No. 4 mixed, 27@27%c; No. 2 white,
30@30%c; No. 3 white, 29@29%c, and No. 4 white

28@284c
RYE—None coming in and market steady and firm. By sample on track: No. 2, 66@67c; No. 3, 63@64c.
FLAXSEED—We quote at 92c per bushel, upon the basis of pure.
HAY—Receipts for past forty-eight hours, 29 cars Market weak. Timothy, choice, \$9 50; No. 1, \$9 00; No. 2, \$7 50; choice to fancy prairie, \$6 50@7 50; medium to fair, \$4 50@5 50; low grade, \$3 50@4 00.

St. Louis.

June 27, 1892. WHEAT—Receipts, 62,000 bushels; ship-nents, 6,000 bushels. Market firm, closing %c ligher than yesterday. No. 2 red, cash, 76%@

7734c. CORN—Receipts, 103,000 bushels; shipments, 92,000 bushels. Market fairly active and higher. No. 2 cash, 433c. OATS—Receipts, 54,000 bushels; shipments,

16,000 bushels. Market unchanged for No. 2

cash, 30½c HAY—Quiet, Prairie, \$8 50@10 00; timothy, \$11 00@15.00. WOOL—Receipts, 335,000 pounds; shipments, 64,000 pounds. Market quiet. Medium, North-ern, 17a2½c; braid and coarse, 15a19c. Texas, Territory, etc.—Medium, 19a21c; coarse, 15a17c. Colorado, New Mexico, etc.—Medium, 17a20c; braid and coarse 13a16c.

Ohicago.

June 27, 1892.

June 27, 1892.

WHEAT—Receipts, 53,000 bushels; shipments, 98,000 bushels No. 2 spring 79%c; No. 3 spring, 71c; No. 2 red, 80%a81c.

CORN—Receipts 372,000 bushels; shipments, 115,000 bushels. No. 2, 51c; No. 3, new, 47%c.

OATS—Receipts, 255,000 bushels; shipments, 239,000 bushels. No. 2, 32%a32%c; No. 2, white, 34%a34%c; No. 3, white, 334a333%c.

WOOL—Kansas and Nebraska wools have not yet made their appearance in any large amounts, yet an increase is noted over last week's receipts. As they continue to come forward it is more noticeable that they are in lighter condition and better grown. An advance in grease prices will also be obtained for these wools. One sale of medium Nebraska was made at 25c Prices range as follows for fine wools of average condition 14@18c; for light fine, 18a20c, and for fine medium 17a19c.

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The Family Doctor.

Conducted by Henry W. Roby, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed.

Abnormal Breathing.

Neither man nor animal breathes through the mouth normally. The only natural way for respiration and inspiration is through the nose. When we breathe through the nose, the cold, dry, impure outward air is sufficiently warmed, supplied with watery vapor and freed from dust. When we breathe through the nose, smelling at the same time through our organ of smell, which assists respiration, we become aware of the presence of an injurious or of a generally abnormal mixture drawn in by the breath, and can then either correct so unfavorable an atmosphere or escape from it. Furthermore, only in the nose are found those fine arrangements which can prevent the entrance of injurious substances into the deeper respiratory organs (larynx and lungs), and thus stop the further advance of the hostile body (painful smoke, irritating dampness, thick dust, etc.,) besides defying that which has already slyly effected an entrance. This is done by the so-called nasal reflex breathing, to which class belongs sneezing. If we breathe through the mouth, the air is neither sufficiently warmed nor satisfactorily moistened, and laden with all its bad mixtures of dust of mineral, animal and vegetable origin, added to injurious gases, reaches the larynx, the air tubes and the lungs. Snoring is only the least among the evil consequences of breathing through the mouth. The swollen, sore, constantly chapped lips, bad condition of the front teeth and decay of the back ones, a defective development of the sense of smell, frequent inflammation of the throat, attacks of fever, diphtheria and catarrh, and soreness of the larynx and lungs are consequences of breathing through the mouth which have been very frequently observed. In children one often sees an habitual and peculiar weak or even stupid expression of countenance. It has also been found, through the experiments of different trustworthy observers, that there is a casual connection between stammering and breathing through the mouth. On the other hand, however, certain forms of nightmare and asthma are causes of breathing through the mouth. That infants are sometimes brought almost to death's door when prevented by a cold from breathing through the nose, is a fact well known to physicians.

When a child or a grown person begins to breathe with the mouth open, there must exist some sufficient cause for the occurrence in the uppermost air passages. No one would voluntarily exchange the only healthy, comfortable manner of breathing through the nose for the burdensome and unhealthy breathing through the mouth. Let any one attempt to breathe through the mouth for five minutes, instead of, as one is accustomed, through the nose, and he will soon be convinced that it is almost impossible. Almost of itself, that is, without muscular force, through the mere pressure of the air, the mouth closes and the original manner of breathing is resumed.

Whoever snores can, as a rule, not breathe through the nose. That it would be useless in such cases to desire to close the mouth mechanically is entirely comprehensible. Every mother, who frequently give; to her child the useless command, "Close your mouth," is aware of this. Here it is better to seek, without delay, the advice of an experienced specialist, in order to determine the cause of this mouth breathing. In the case of children, in particular, an unnecessary delay might prove fatal.

Now there are certainly cases in which the cause of this habit may be determined and the habit still remain. But these are the exceptions; as a rule normal breathing results as soon as the air enters the correct passages; if the snoring and breathing through the mouth returns as an evil habit, then and only then can mechanical means be used with advantage to stop this opening of the mouth.

The simplest and oldest of these is to place a band from the chin to the top of the head. This often suffices. As the mouth remains closed by pressure of the air, some of the mechanical appliances to

produce this effect might be used. Sometimes it is even sufficient to place a piece of celluloid plate between the teeth, but one would not likely decide to place a foreign substance in the mouth of a sleeper, particularly a restless child.

All of these apparatus must be put on every evening, and worn over night, until the normal position of the lips and lower jaw is regained. But the most important thing is to remove the obstructions to normal breathing. - Scientific American.

Sanitary Mistakes.

There is much in popular errors, says Dr. P. C. Redmondino, of San Diego, Cal., that helps to bring about our condition of physical degeneracy. For example, people look upon cold as their great and dreaded enemy, whereas cold-except in an extreme degree-does not and cannot hurt any one primarily. To shut out the cold, which is harmless, they shut themselves in with ochlesitic poisons, as morbific and fatal in the end as the effects of alcohol and fusel oil. They have a vague idea that "catching cold" is to be avoided, but they have not the least idea of the lasting poison of ochlesis or in fomites. A man will give a friend a wide berth during the critical period of typhoid fever, but as soon as that period is passed he and his whole family will troop into the room, in blissful ignorance of the researches of Uffelmann and others into the wonderful tenacity of life possessed by the typhoid bacillus; or, so that they avoid the immediate breath of a consumptive, they live in fancied security. That this infection, as well as that of typoid and other disease germs, is longer-lasting in a dark or north room, is not of any importance. The lady of the house, on the departure of her consumptive visitor, will at once draw the curtains and close the windows of her parlors that the light and dust may not affect her carpets and bric-a-brac, perfectly unmindful that the care she bestows to protect these things is fraught with risk to the health and life of a son or daughter. She does not know, nor has she taken the pains to learn, nor has any one undertaken to instruct her, that the bacillus of such diseases as typhoid fever, diphtheria, phthisis, and most diseases which have a specific germ, cannot exist and hold their identity in solar light and air, which, as has been demonstrated by Koch, kills them in from a few moments to a few hours, whereby no room is left for doubt that, by the construction of our houses and by the studied exclusion of light and air, we do most for the retention of these disease germs, and at the same time contribute to the preservation of their

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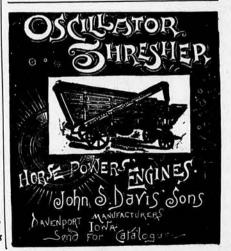
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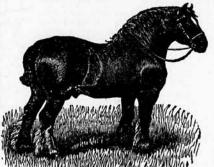


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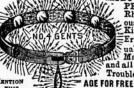
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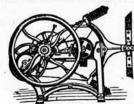
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FOR WEEK ENDING JUNE 15, 1892

Sumner county-Wm. H. Carnes, clerk. Sumner county—Wm. H. Carnes, Cierk.

MARE—Taken up by N. L. Glasgow, in South
Haven tp., May 28, 1892, one gray mare, 15 hands
high, 6 years old; valued at \$100.

MARE—By same, one gray mare, 13 hands high, 6
years old; valued at \$25.

MARE—By same, one black mare, 14 hands high,
9 years old; valued at \$40.

MARE—By same, one light brown mare, 14 hands
high, 7 years old; valued at \$40.

HORSP—By same, one black horse, 14 hands high,
3 years old; valued at \$40.

COLIT—By same, one black colt, 1 year old; valued
at \$25.

nt \$25. COLT—By same, one brown colt, 1 year old; valued at \$25.

Harper county-Wm. Duffy, clerk.

HORSE—Taken up by J. L. Blubaugh, in Banner tp., May 15, 1892, one dark bay horse, 3 years old, about 15 hands high, star in forehead, left hind foot white; valued at \$65.

Cherokee county-P. M. Humphrey, clerk. MARE—Taken up by R. A. Hibbard, in Garden tp., two miles east of Lowell, May 26, 1892, one bay mare, 14 hands high, hind feet white, about 8 years old, brand similar to R on left jaw and indescribable brand on left hip.

Sherman county - Ernest J. Scott, clerk. PONY—Taken up by J. N. Williams, in State Line tp., P. O. Lamborn, May 27, 1892, one black pony mare, weight 1,000 pounds, branded T on shoulder; valued at \$30.

FOR WEEK ENDING JUNE 22, 1892.

Cloud county-F. A. Thompson, clerk. COLT—Taken up by Zepherin Grandpre, in Au-rora tp., June 2, 1892, one black horse colt, 2 or 3 years old, weighs about 800 pounds, no marks or brands; valued at \$30.

Sherman county-Ernest J. Scott, clerk. PONY—Taken up by J. W. Smalley, in Itasca tp., P. O. Goodland, May 26, 1892, one bay pony mare, branded W. H. on left hip; valued at \$20.

Dickinson county-F. E. Nattorf, clerk. HEIFER—Taken up by J. P. Moore, in Liberty tp., P. O. Woodbine, May 13, 1892, one red and white spotted heifer, about 2 years old; valued at \$12.

FOR WEEK ENDING JUNE 29, 1892.

Douglas county-F. D. Brooks, clerk. STEER—Taken up by Albert C. Walter, in Kanwaka tp., May 3, 1892, one 2-year-old brindle steer, no marks or brands; valued at \$17.
STEER—Taken up by Thomas A. Shaw, in Kanwaka tp., May 1, 1892, one 2-year-old red and white steer, dehorned, no brand visible; valued at \$16.

Rooks county - Charles Vanderlip, clerk. PONY—Taken up by William McKenna, in Walton tp., P. O. Amboy, June 10, 1892, one gray mare pony, 8 years old, branded on left hip; valued at \$25.

Gray county-E. G. Barton, clerk.

STEER—Taken up by W. W. Frank, in Richland tp., June 15, 1892, one 3-year-old steer, white with red neck, horns, left ear off, right ear under-bit, branded on left side and hip; valued at \$20.

Sheridan county-J. B. McPherson, clerk. PONY—Taken up by N. L. Simpson, in Solomon tp., one black horse pony, 11 years old; valued at \$20. COLT—By same, one gray mare colt, 1 year old; valued at \$15.

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ber of ex-Union soldiers will go with us to join them in a Grand Reunion Parade at Omaha. J. W. BREIDENTHAL, Chairman State Central Committee, Reunion Parade at Omaha.