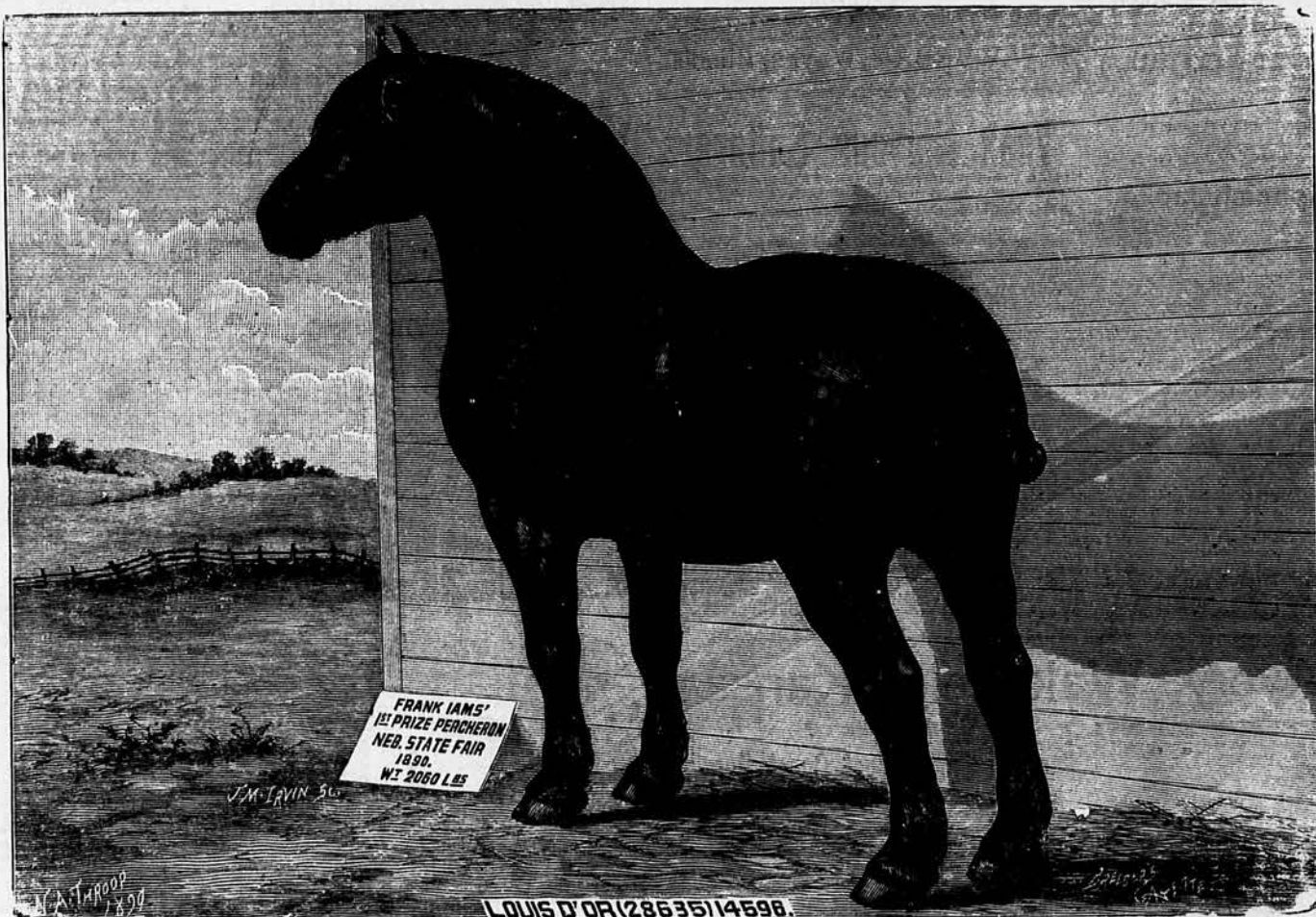


KANSAS FARMER

ESTABLISHED 1863.
VOL. XXXI, No. 4.

TOPEKA, KANSAS, WEDNESDAY, JANUARY 25, 1893.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.



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Imported Shire and
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Stallions and mares of
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Registered stallions, ready
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1866 OAKLAWN FARM. 1893

Now the Only Place

in America where Large Numbers of both Draft
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AND

110 Percheron Mares,

Largely Brilliant Blood,

50 French Coach Stallions

AND

60 French Coach Mares,

Large, Stylish, Fast,

Comprise the stock now on hand.



The Demand for the Choice
Horses always found at
OAKLAWN FARM continues,
while the Importers of low
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Horses are abandoning the Field.

It is admitted that the best can only be
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more for the money at Oaklawn than you can
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from long and successful experience and unques-
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give yourself a chance to buy good
ones at low prices and visit Oaklawn.

A Large and Choice Importation Arrived
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Separate catalogue for Percherons and for French
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M. W. DUNHAM, Wayne, Illinois.

Weak Nervous Sufferers

From Youthful Errors, loss of Manly Vigor and
vital drains can be permanently restored to **HEALTH
AND MANHOOD** at their own home, without ex-
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failing methods. **Private Diseases, Varico-
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A Nebraska-bred horse, raised on Maple Grove farm, was last year awarded
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150 head of Registered, Imported and home-bred Percheron
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**100 BLACK PERCHERONS****FRENCH DRAFT,****CLYDES AND SHIRES.**

Iams' horses were "out of sight" at the great St.
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cent. interest, or cheaper than any live importer, or pay your fare to see them, and Iams pays the freight.

MORE STATE PRIZE-WINNERS THAN ALL NEBRASKA IMPORTERS.

\$500 SAVED by buying of Iams. He does not want the earth and it fenced for profit. Good guaran-
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Our Book, telling how to feed linseed cake and meal, is mailed free on application.

TOPEKA LINSEED OIL WORKS, Topeka, Kas.**FAY CURRANT HEADQUARTERS GRAPES****BEST & CHEAPEST NEW FRUITS.**—Easter, Rockwood, Eaton, Meyer and all others New and Old. Small
Catalogue **FREE**. **Geo. S. JOSSELYN, FREDONIA, N. Y.**

SEED CORN For \$1.25 per bushel—
Early White Dent,
Iowa Yellow Dent (extra Early) and Early Masto-
don—three of the largest and best early varieties
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No Trees of 1st quality can ever
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hap you know it. By freight, prepaid if
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You actually pay less than for the puny
stuff. 1,000 acres Nurseries. 20,000 acres
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SEEDS Garden
Flower
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Seed Potatoes, Fruit Trees, Plants
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OUR NEW CATALOGUE
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Plant Tested Garden, Flower and Farm Seeds
and be sure of a good crop. Our stock is complete and
the quality is unsurpassed. Send for our Free Illustrated
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DIVIDED AS FOLLOWS:
First Prize, \$200; Second Prize, \$100; Third
Prize, \$75; Fourth Prize, \$60; Fifth Prize,
\$35; Sixth Prize, \$20; Seventh Prize, \$10.

PRICE, \$2.50 per bushel, including bags.

For particulars write to the

**Iowa Seed Co.,
Des Moines, Iowa.****\$1100 FOR 4 TOMATOES!**

This Wonderful
"EARLIEST TOMATO IN THE WORLD"
is a perfect success.
It has proved the
earliest and best and
bears abundantly of
large bright red toma-
tors, very smooth, of
excellent quality and
free from rot. My
plants set in garden
last of May produced
full size ripe tomatoes
July 2nd. I want a
great record for it in
1893, and will pay \$500
cash to a person grow-
ing a ripe tomato in
75 days from day seed
is sown, also \$400 to
the person growing a
ripe tomato in least
number of days from
day seed is sown. \$125
for next and \$75 for
next. Beware of im-
itations. Never offered be-
fore. It is all head and
sure to head, very uniform,
of large size, firm and fine in texture, excellent quality
and a good keeper. I will pay \$100 for heaviest head
grown from my seed in 1893, and \$50 for next heaviest.
Single heads have weighed over 60 pounds.

SURE HEAD CABBAGE is large and
single specimens under sworn testimony have weighed
over 5 lbs. They are of mild and delicate flavor, grow
rapidly, ripen early, flesh white and handsome. I will
pay \$100 for heaviest onion grown from my seed in 1893,
and \$50 for next heaviest.

GIANT SILVER QUEEN ONION is large and
single specimens under sworn testimony have weighed
over 5 lbs. They are of mild and delicate flavor, grow
rapidly, ripen early, flesh white and handsome. I will
pay \$100 for heaviest onion grown from my seed in 1893,
and \$50 for next heaviest.

ALICE PANSY has created a sensation every-
where. They grow larger and con-
tain the greatest number of colors (many never seen
before in pansies) of any pansy ever offered. I offer
\$500 to a person growing a Blossom measuring 4 1/2 in.
in diameter, and \$300 for largest blossom grown, \$100 for
second, \$50 for third, \$50 for fourth, \$50 for fifth and \$50
for sixth. Full particulars of all prizes in catalogue.

MY CATALOGUE offered persons sending me
largest number of customers, and \$500 for largest club
order. \$1.00 customers get 50 cents extra **FREE**.
I will send a packet each of Earliest To-
mato in the World, Sure Head Cabbage,
Giant Silver Queen Onion, Alice Pansy and Bargain Cata-
logue, for only 25 cents. Every person sending
silver 1 lb. or 1 lb. O.M.O. for above collection will receive Free
a packet Mammoth Prize Tomato, grows 14 ft. high and
I offer \$500 for a 4 lb. tomato grown from this seed. If
two persons send for two collections together each will
receive Free a packet Wonder of the World Beans, stalks
grow large as broom handle and pods are 18 in. long. It
is a perfect wonder. **F. B. MILLS, Rose Hill, N. Y.**

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SALZER'S GREAT NORTHERN OATS.
Oats are not all alike. This was more than proven, when in 1889
Salzer's Bonanza Oat took the prize offered by the American Agricul-
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Strickland, of Albion, N. Y., won this on a yield of 134 bu. per acre. We
have kept pace with the times and now offer an oat its superior in
every respect! It is a remarkable grower, great stooler, 2,000 kernels
having been grown from one. It is the Oat for everybody. A tre-
mendous cropper, strong, healthy, insect proof, yielding from 80 to
140 bu. per acre, on all soils and in all climates. It never fails.

THE EARLY WISCONSIN POTATOES.
The greatest potato since the days of Moses. The editor of the Rural
New Yorker, an authority on potatoes, testing same, reports the as-
tonishing yield of 730 bu. per acre! How is that for new blood! Over
60,000 Bushels Choice Seed Potatoes for sale.

No More Hard Times.

That is the universal verdict if you plant Salzer's Seeds as they always
SPROUT, GROW AND PRODUCE.
Our seeds are grown in the extreme North (use 5,000 acres) with
great care. They are full of life, vitality and vigor and must produce.

TO-DAY. We would like your order for any of the following—
10 Farm Grain Samples, 8c; with catalogue, 15c.
11 Grass and Forage Plant Samples, 10c; with cata. 18c.
8 Field Corn Samples, 12c; with catalogue 20c.

For 14c Postpaid (With Catalogue 22c)
1 Pkg. Long Giant Cucumber, 10c
1 Pkg. Three Weeks Radish, 10c
1 Pkg. Silver State Lettuce, 15c
1 Pkg. New Early Giant Tomato 20c
5 Pkg. Choice Flower Seeds, 35c

In all 9 Pkgs. Listed by no
one under 90c
Our price 14c, less than
14c the retail value to intro-
duce Salzer's Seeds everywhere.

Our Catalogue
costs over \$50,000 to publish and
distribute. It is a mammoth work
of 120 large pages, beautifully il-
lustrated, 6 colored plates, each
fit to frame. Treats fully of Plants
Roses, Trees, Vegetables
and Farm Seeds, Etc.,
and is mailed you upon
receipt of 2c postage.

**GREAT NORTHERN
OATS.**
THE RURAL NEW YORKER
RECORDS YIELD OF
736 BUS PER ACRE
EARLY WISCONSIN POTATO
736 BUS PER ACRE

JOHN A. SALZER SEED CO. LA CROSSE, WIS.

KANSAS FARMER

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TOPEKA, KANSAS, WEDNESDAY, JANUARY 25, 1893.

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TABLE OF CONTENTS.

PAGE 3—The American Berkshire Association.
PAGE 4—THE STOCK INTEREST.—Short-horns and Thoroughbred Cattle.
PAGE 5—AGRICULTURAL MATTERS.—December Crop Report. A Farmer's Experience on the Medicine River. Experience at Maple Hill.
PAGE 6—THE FARMERS' FORUM.—The Farmers Build Up the Monopolies. The Effects of Speculation on Prices of Wheat.
PAGE 7—THE HORSE.—Horse Market Reviewed. Less Hay for Horses. Our First-Page Illustration....Gossip About Stock.
PAGE 8—THE HOME CIRCLE.—Wayne Goodwin (poem). Curious Facts About Needles. The Care of Lamps. Use Borax. A Monkey Story. Couldn't Master Physiology.
PAGE 9—THE YOUNG FOLKS.—The Wanderer's Prayer (poem). Who Ever Milked a Moose? Billy.
PAGE 10—EDITORIAL.—Anti-Option. The Good Roads Movement. Dairy Schools in Iowa. Course of Lectures to Farmers.
PAGE 11—EDITORIAL.—Secretary of Agriculture. Stocks Shrinking. Shawnee County Horticultural Society. Missouri Valley Horticulturists. Some Practical Experience.
PAGE 12—HORTICULTURE.—Insects on the Farm. Whole-Root vs. Piece-Root Grafting.... THE POULTRY YARD.—State Poultry Show.
PAGE 13—IN THE DAIRY.—Dairy School Work.
PAGE 14—THE FAMILY DOCTOR.—Answers to Correspondents. Criminology....The Times Excursion.
PAGE 15—THE VETERINARIAN.... Market Reports.

The American Berkshire Association.

EDITOR KANSAS FARMER:—The eighteenth annual meeting of the American Berkshire Association was held in the office of Col. Chas. F. Mills, its President, Springfield, Ill., January 18, 1893.

The report of the Secretary evidenced a very great increase in the business of the association, and showing that the Berkshires have not only held their own as the standard of all swine, but are in increased demand.

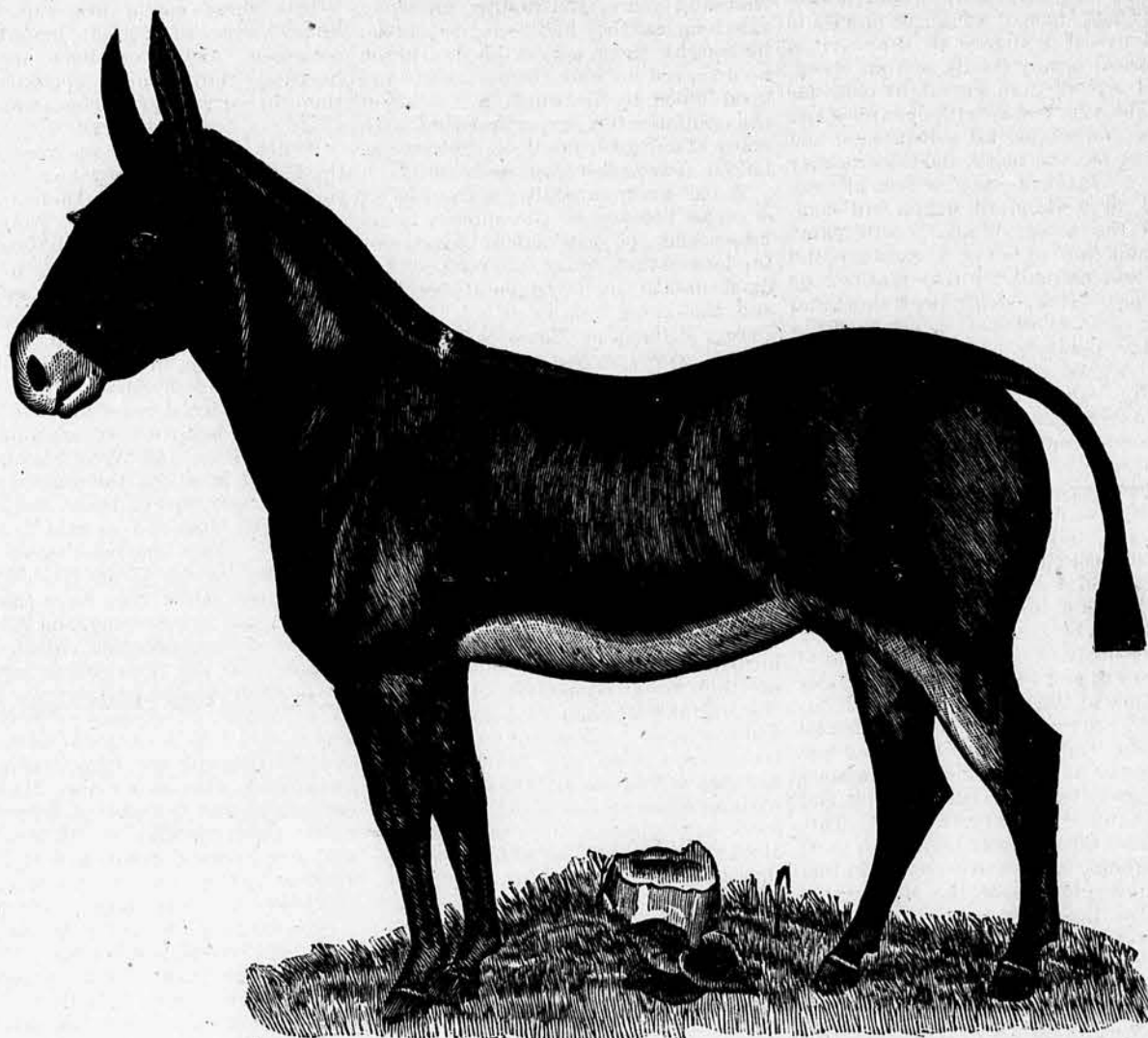
The rules for entry for the record were amended to read that the registry of animals under 1 year of age shall be \$1 each, and \$1 additional for each year thereafter. That transfer fees shall be 25 cents each if sent for registry within six months of change of ownership, and 50 cents each for animals not sent for record within six months from time of change of ownership. It was also ordered that after March 1, 1893, every patron of the record who does not own a full set of the records of the American Berkshire Association shall, with every application for registry, send 10 cents in addition to the regular registry fee, the said 10 cents to be credited to the party making the remittance, and when the amount so credited shall reach the sum of \$5 the earliest issue of the volumes of the record shall be sent in payment therefor.

It was also ordered that at all State and Provincial fairs where separate classes are provided in 1893 for recorded Berkshires, the American Berkshire Association will offer a special prize of the first ten volumes of the American Berkshire Record, valued at \$50, for the best recorded sow and litter of not less than five recorded pigs under 6 months of age, bred and exhibited by a resident of the State or Province in which the fair is held.

The conditions upon which this premium is offered are as follows: First—That the competing animals be recorded in the American Berkshire Record prior to date of entry at the fairs and that lists of such entries be furnished the Secretary of this association at the close of the fair. Second—That these offerings and conditions be printed in the premium list of the fairs in connection with the classification of swine, or that reference be made at the close of the classification of swine, to the publication of this announcement elsewhere in the premium list.

It is to the interest of breeders in every State to see that the above conditions are complied with by their fair association.

C. F. Mills, President, and J. G. Springer, Secretary, were re-elected. J. G. S.



FOSTER, WATKINS & CO.,

Importers of Poitou and Catalanian Jacks, Belleville, Kansas.

A Successful Kansas Windmill.

It is more than probable that within the next twelve months some of the thousands of KANSAS FARMER readers will make a selection of a wind-mill, and will no doubt exercise skill and judgment in buying the most practical and durable. The Currie Wind-mill Company, of Manhattan, Kas., beg leave to announce that they now have a mill, both in steel and wood, one that is as near perfection as human skill and ingenuity can make. In giving a few facts boiled down, they say: "It is not necessary to give a long description of our steel wind-mill, it being so simple that a glance at the cut will explain it all, as it has no complicated parts, such as cams, elliptic gear with traveling axis, sprocket wheels and chains, weights, links, levers and other useless parts too numerous to mention. Our pivot or turntable, governor, wood boxes and pump drive are just the same as we have been using with our wood wheels and vanes for the last five years. All the changes we have made is to build a steel wheel and vane, and placing on a simple set of spur gear so as to allow the wheel to make three revolutions for one stroke of the pump, so we are not putting out a new and untried mill, but one that has stood the test for the last five years in the North, South, East and West, and has gained an enviable reputation. The outside rim of our wheel does not go about half way out on the fans as others do and leave the outer ends of fans unsupported and flapping around like rags on a clothesline, but encircles the whole wheel and supports the fans in the most rigid manner. Most manufacturers of wind-mills print a table giving the size of

cylinders to be used with their mills for different depths of wells. This we do not do, but say use the size of cylinder you have on your pump, or if you are going to buy a new one, get the size you want, for our mill is a pumper, and will pump from any well that has got a bottom to it, no matter how deep. We use the wood boxing boiled in oil and set so the wear is on the end of the grain. No climbing the tower to oil. They never wear out. Wood boxes have been used for years and stood the test.

"Our steel tower is a model of strength and neatness, and like our wheels, is built cheaply and serviceable.

"In conclusion will say, if you want the most powerful, strongest, best made, least complicated, the best regulating mill, one that will work on any kind of pump, with any size of cylinder, and in any depth of well, one that will wear the longest, and the prettiest looking, then buy the Currie Steel Mill.

"All mills shipped on trial. Be your own judge by giving them a trial. If not satisfactory it will cost you nothing. Write for prices.

"We have excellent shipping facilities, being located on the Union Pacific, Atchison, Topeka & Santa Fe, Chicago, Rock Island & Pacific, Manhattan, Alma & Burlingame, Chicago, Kansas & Nebraska and the Blue Valley railroads. So we can make direct shipments north, south, east and west. Also can get low freight rates.

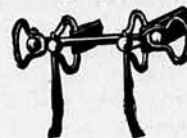
"Our mills are so simple that any carpenter can erect them. Directions for erecting sent in the box with each mill."

On this page may be seen a fair illustration of an imported jack of the class which

are meeting with such demand among stockmen. Regarding the present condition of trade, Foster, Watkins & Co., say: "The Poitou jacks are doing remarkably well and the inquiries for jacks are very numerous, particularly for large jacks. We think the demand is even greater than the supply. The Poitou jacks, having such great size and bone, and being great breeders, are selling rapidly. Their strong constitutions, smoothness, life and prolific breeding qualities, are other points very much considered by buyers. The Catalanian jacks are also doing well and our sales of them have been very satisfactory."

A New Bit.

The attention of horse owners has been attracted by the merits of the "Common Sense" bit just patented by the Racine Malleable Iron Co., of Racine Wis., the makers of the famous "Jay Eye See" bit.



The new bit is different in principle and embodies many improvements on old-style bits. It can be adjusted for mild or severe use, and is well calculated to meet with universal favor among horsemen and farmers. Although new to the market the demand has already assumed good proportions and the trade is anticipating a very large sale. For the benefit of those who are interested in such matters the manufacturers issue a descriptive catalogue which they send without charge to any one making application to their address.

The Stock Interest.

SHORT-HORNS AND THOROUGHERED CATTLE.

By Col. H. M. Valle, Independence, Mo.

We have among us several other beef breeds of cattle besides the Short-horns, claiming the attention of our breeders, and said to be thoroughbred, viz.: The Herefords, Devons, Galloways and Angus, all very unlike each other in many important particulars, and among them you can find some really good cattle, and I consider they have their location and place.

While I am a Short-horn man, believe in them, can make quicker and better beef from them than any other, yet, because of this fact, I trust I am not prejudiced unduly in their favor, nor against any other class, for I am quite human, and I may say breeding cattle with me is more of a diversion than a living; and, like other men, would have not only the best class, but the best of that class, hence would be unwise to blind myself in regard to the merit of any breed or any family of that breed, and I would that we might consider this question to-day with open eyes and hearts, forgetting all self-interest and seeking but the truth, and that we may have a platform upon which all can stand, or a standard which will command the assent of all. I will name the make-up of what I consider the best beef animals for this platform or standard: Head small, neck short and small, not over twelve inches from the shoulder points to the jaw-bone, and in a bull, a good crest, indicative of masculinity and free from dewlap, shoulders not only deep but thick—and thickness is much more important than depth, not coarse, and well covered with flesh, crops wide, chimes full, leaving little or no depression behind the shoulders, making a large heart girth, fore-ribs and ribs well sprung and long, and carried well back to the hip, loin wide, hips low, without hocks, enabling the flesh to be carried over them evenly and smoothly to the rump, and that of fair length and full, having no vally or fool piece at the end, thighs and hams full and running well down, bone small but solid, legsshort, hair thick and fine next to the skin with long hair among it for protection, skin rather thick, and at the same time soft or mellow. This I consider the stamp and style of a good beef animal, and doubt if you could find a sensible objector to it. Here, then, we have the starting point, the unit, the scale to weigh all classes by, and such as fall below this standard we must discount and discount them as often as they fall short.

My description above is the description of some Short-horns of to-day, what all ought to be, and what most of them would be if properly mated and bred. It was the form of the cattle of the earlier Percy and Milbanks, who bred good cattle nine hundred years ago. It was carried into the herds of the elder Maynard and Colling, and from them into the hands of Robert and Charles Colling, to Stephenson, for his Princess family came in an unbroken line to him from the Milbank-Percy stock to Bates, Mason and even Booth, for Booth's earlier Short-horns were of this same blood, but later he added an admixture that left some unpleasant effects. All along this line for these hundreds of years this same noble form had been carried by certain families of Short-horns down to our day; not all of these families by any means, but enough of them to keep alive and perpetuate the form I have described, and whoever thinks he is breeding better cattle to-day than existed in Britain at the time of the Norman conquest, is unfamiliar with the description and history of the cattle of that early time. All along this line fashion would play with them, sometimes demanding most enormous hips and hind-quarters, until the cows were unable to drop their calves, upon the plea that the loin, rump and round furnished the best beef, and they could not get too much of it.

Later, the rump and hind-quarters were whittled down to a point, and the fashion was immense shoulders, crop and chimes, with big heads and necks thrown for weight, and reputed masculinity. Not all the breeders were

carried away by fashion to the malformation of their stock, by any means, as evidenced by the Stanwick cow, the bull Hubback, and the cow Favorite, bred by Maynard.

While Robert and Charles Colling are recorded as improvers of Short-horns, they were never able to breed better animals than they bought of Stephenson and Maynard, their first Duchess and Hubback.

We have families of cattle called Bates. I have them and I love them for what they are, but Thomas Bates did not originate them, and never named them for him, but gathered them from these breeders I have named and others who had this same blood, and never was he able to breed better cattle than he bought, and all the credit he is entitled to is that he had sense and industry enough to trace back the pedigree of his six families he finally obtained—discarding all his earlier families as worthless or unsatisfactory—by record or tradition for near one thousand years, and finding all along that long line they had been good cattle, he bought them, and in his exultation he declared he had the only pure and good blood in the world, and I am of the opinion, after experimenting with many of our good families, the same as he did, *it is the best blood in the world.*

We all know capability a fixed habit or type; potency or pre-potency is an inheritance, be it in man or beast, and the longer that line of inheritance, that fixed habit, the stronger it becomes and the more reliable it is. If these Percy, Milbank or Bates cattle, if you please, were early-maturing, had the habit of assimilating food to flesh more perfectly than other cattle one thousand years ago, and all along that line down to the present time, ought not that habit to be very firmly fixed by this time, provided it has been mated or bred properly? Now I will leave these cattle with you for a moment, and briefly consider the

HEREFORDS (AND OTHERS).

These are cattle with merits, and are the supposed admixture of the Short-horns and Montgomeries. Some writers say they are an admixture of the Devons and Glomorgons, but I doubt this, and I believe the first supposition to be true. Less than one hundred years ago they were reds, browns or brindles, with no white on them, and their white faces are supposed to come from the Montgomeries, but, be that as it may, they have white faces now, which they usually beget on other breeds. They have large heads, which is of no use, and this costs just as much to produce, each extra pound of head, *as so much good beef*, and we must discount them in the head. Their necks are long, coarse, with heavy dewlaps, which is either waste or poor beef, and we must discount them again, not as our standard; their shoulders lack thickness and chimes fullness, though deep enough, their ribs are too hanging, their rump not full enough and their hams as a rule are what is called cat hams, and they must have a discount for each of these defects. They mate well with the Short-horns in the first cross, and produce their superior as a beef animal, but, on our common cattle they perpetuate their defects, even to an intensity, and seem rough and coarse, hence cannot be said to be good graders of them.

DEVONS.

These cattle have a longer traditional line of ancestry unbroken, than the Short-horns or any other breed. They were the principal cattle of Italy long before the Christian era, and were the cattle used, undoubtedly, by Hannibal for his pyrotechnic display to frighten the Romans from their impregnable pass, and it must have been a grand and frightful sight to see four thousand burning torches tied to the horns of two thousand cattle rushing madly up the mountainside, scattering fire everywhere, and it is not strange the Romans fled from their guarded pass in dismay. I must admit, the Short-horns would not have answered Hannibal's purpose as well, for their horns, necks and legs are too short, and their action too slow for such a display. The Romans brought these cattle into Great Britain at the time of their conquest, and until the last few years they were invaluable for agriculture and road purposes,

easily traveling six miles per hour for hours if necessary. From England they came to us, and we have bred them after their style and form. They are fair beef and milk cattle, are good rustlers, our best mountain and poor herbage cattle, as they will climb around amid the rocks like the deer and elk, and will live where they can. They have the most perfect digestion of any of the bovine race, and will be in great demand for our mountain countries in later years. The Romans took this same family of cattle also with them on their forays and conquests of Spain and Portugal, and from those countries they were brought to South America, Mexico and Texas. Texas and Spanish cattle are the legitimate descendants of the Italian cattle of ancient history, and we see in them many of the characteristics of the mountain Devons of Great Britain, viz., the head, horns, neck, shoulders, length of ribs, light hind-quarters, length of legs and character of bone. While these cattle are superior to Short-horns in rough, mountainous countries, and upon short and poor herbage, they cannot compare with them in our rich grass countries.

GALLOWAYS.

While these cattle are very unlike the Herefords, yet they have many of their defects, excepting their quarters which are usually good. They have most wonderful hide and hair; it is a perfect shelter and is suited to a cold climate, but it renders them dull and stupid in a warm climate, consequently they are out of place in such.

Tradition says they are an admixture of the black ox of Africa, which was a low, small-horned beast, and the Short-horn, but I believe they are a mixture of the black ox and West Highlander. Certain it is, about the middle of the last century, most of them had horns, and were classified as middle-horns, and their hair and color were quite the same as the West Highlanders. While good cattle, they have the fault of being late in maturing, and not good graders on our common cattle, hence cannot rival the Short-horns, and are the more expensive beef.

The Angus, an offshoot of the Galloways, and, I believe, an admixture of the Short-horn, are more refined in head, neck, ribs and rump, than the Galloways, and I believe a better beef animal, though they do not mix well with our common cattle, and are much affected by the heat, and their place is in a cold climate and on rich grass.

Now we have disposed of all the principal beef breeds, and because they are not after our pattern and standard we have consigned them to their locations and climate, where they are not only useful, but our best cattle, and we return to our favorites, the Short-horns, and since we have branded them the *best beef cattle in the world*, you will want me to sell you *how* to breed and raise them, that the above form may be perpetuated or obtained, and in doing so I shall but reiterate what most of you know, and knowing, fail to practice.

First, if you are a new beginner, get cows as near the above form as you can, having great care as to their thickness through the shoulders and heart girth, for a thin, flat chest can never make a quick feeder, or the producer of good, healthy, strong, quick feeders, because such are always deficient in lung power and the lungs need a wide floor, spread out to rest upon, that there may be a free, uninterrupted circulation of air through them to thoroughly oxidize the blood and food taken into the maw.

Cattle are natural and intelligent chemists, and their business in life is to convert grass and grain into flesh and the perpetuation of their race, and they seldom make a mistake in mixing their compounds or doing their work. Grass and grain are seemingly inanimate particles of matter, but in a few hours after eaten by cattle, a portion of this matter is endowed with life; it moves, it sees, it hears, it feels, and is intelligent, organized matter. Man cannot make flesh out of grass and grain by any process known to chemists, hence must employ these natural chemists to do it for him, and the chemist who will make the most flesh of the best quality, out of the least consumption of raw material—food, is certainly the best worker or chemist for

That Tired Feeling

The marked benefit which people overcome by That Tired Feeling derive from Hood's Sarsaparilla, conclusively proves that this medicine "makes the weak strong." J. B. Emerton, a well known merchant of Auburn, Maine, says: "About five years ago I began to suffer with very severe pain in my stomach, gradually growing worse. I took Hood's Sarsaparilla, being convinced that I was troubled with Dyspepsia complicated with Liver and Kidney troubles. I improved at once and am certainly very much better and feel more like working."

Mr. J. B. Emerton.

Hood's Sarsaparilla.

always gives me relief and great comfort. It is a God-send to any one suffering as I did.

HOOD'S PILLS cure Habitual Constipation by restoring peristaltic action of the alimentary canal.

LEATHER kept soft but stocky with Vacuum Leather Oil; 25c, and your money back if you want it.

Patent lambskin-with-wool-on swob and book—How to Take Care of Leather—both free at the store.

Vacuum Oil Company, Rochester, N. Y.

man to own, for food represents man's labor, his strength and capability. But these chemists cannot do a good job quickly unless they have skill in that line; unless they have the habit of doing it, and no animals can possibly have this habit unless they have good lung power. Food taken into the maw, if it long remains undigested creates a fever, and it becomes a rank poison, making the animal ill, preventing the assimilation of that food to flesh, and consequently it passes off as waste. Digestion will be indifferent in a cow unless she can breathe in an abundance of oxygen, and this element burns up the carbon of the food, and enables the cow to assimilate the nutritive part of it to flesh.

While a good cow is a good thing and very desirable, yet it is of minor importance in comparison, with the bull, for you must not forget a bull is the half of the herd, in the produce, be his calves one or a hundred, hence, should be selected with the greatest care. Not only should you look well to his individual merits, but to his pedigree as well, and how he has been bred and kept, and what are the merits of the stock of his breeder, kept in a natural condition. I say, look well to the pedigree, as well as the individual, for we have all seen good individual bulls, the produce of the first cross on a "scrub" cow, but such you know cannot be reliable. Then again, is it not true that a long line of well-bred and mated animals are better than a short one no better bred? Would you think a man wise or sensible, he having his choice of two animals about the same in merit, one, we will say with twelve crosses of good bulls, the other with only four, if he should select the short line instead of the long one? If there is such a man, he will certainly make a failure of Short-horn breeding.

Having determined, settled in your mind, just the form and style of Short-horns you want, and have a bull to suit you, be it my form above described or any other, then stick to it. Select your bulls ever after of that same character, for, if you are changed by every freak of fashion, caprice or passing breeze, you will prove yourself a mere mixer of incongruous matter.

All breeders love uniformity in their breeding, but how can they expect this when they select a different formed bull as often as they change bulls? The production may be like the sire, or like either of the earlier ancestors, they can never tell which; hence, stick to your chosen form, and if you desire to improve it in some points, don't attempt too radical a change, for you may breed even greater defects, for instance: If your twist is light, don't use a bull remarkably good in this regard and deficient in the shoulders.

(To be continued next week.)

The verdict of the people is that Dr. Bull's Cough Syrup is the best remedy for coughs, colds, sore throat, asthma, etc.

Agricultural Matters.

DECEMBER CROP REPORT.

The government crop report for December, issued January 9, 1893, gives a final summing up for the last year.

PRICES.—The December returns relate to the average farm price of the various agricultural products on the first day of the month. In examining the figures, which are presented in detail by States, it must be borne in mind that they represent the prices received by producers for their own crops, either on the farm or in the nearest local town or railway market. In any comparison with commercial quotations due allowance must be made for expenses of handling, marketing and profits of middlemen.

CORN.—The corn crop of 1892 is estimated at 1,628,464,000 bushels, grown on 70,626,658 acres, valued on the farm at \$642,146,630. The average yield per acre is 23.1 bushels and the average price 39.3 cents per bushel.

The record of acreage by States has been thoroughly revised in accordance with all available data, including national and State census enumerations, correcting discrepancies of recent and previous annual comparisons of acreage.

The crop of corn is short, exceeded in quantity seven times in the last ten years, but slightly larger than in 1883, 1887 and 1890. The area is considerably reduced, the reduction being heaviest in the great corn-producing region, though offset in part by increase in the Atlantic States, and throughout the entire cotton belt. In the valleys of the Ohio and Missouri, planting was retarded and limited by heavy rains which prevented plowing. The figures by States are:

CORN.

| States and Territories. | Acres. | Bushels. | Value. |
|-------------------------|------------|---------------|---------------|
| Maine..... | 13,287 | 472,000 | \$316,082 |
| New Hampshire..... | 25,327 | 957,000 | 622,285 |
| Vermont..... | 45,229 | 1,643,000 | 1,051,309 |
| Massachusetts..... | 40,039 | 1,550,000 | 961,175 |
| Rhode Island..... | 9,132 | 305,000 | 192,156 |
| Connecticut..... | 43,997 | 1,518,000 | 941,096 |
| New York..... | 527,689 | 17,414,000 | 10,448,242 |
| New Jersey..... | 288,742 | 9,124,000 | 5,201,880 |
| Pennsylvania..... | 1,299,406 | 39,692,000 | 22,590,173 |
| Delaware..... | 201,894 | 3,775,000 | 1,661,176 |
| Maryland..... | 629,361 | 12,985,000 | 5,834,177 |
| Virginia..... | 1,708,706 | 26,067,000 | 13,815,352 |
| North Carolina..... | 2,485,010 | 25,347,000 | 13,687,435 |
| South Carolina..... | 1,591,677 | 16,718,000 | 9,529,187 |
| Georgia..... | 2,945,708 | 32,992,000 | 18,475,481 |
| Florida..... | 491,379 | 4,422,000 | 2,653,447 |
| Alabama..... | 2,513,621 | 30,696,000 | 15,946,12 |
| Mississippi..... | 1,990,684 | 27,272,000 | 13,908,909 |
| Louisiana..... | 1,071,588 | 15,859,000 | 7,920,603 |
| Texas..... | 8,441,211 | 73,642,000 | 33,138,862 |
| Arkansas..... | 1,962,524 | 34,344,000 | 16,141,760 |
| Tennessee..... | 3,118,431 | 61,274,000 | 26,347,884 |
| West Virginia..... | 636,534 | 14,322,000 | 8,020,328 |
| Kentucky..... | 2,950,000 | 68,805,000 | 27,522,146 |
| Ohio..... | 2,852,157 | 83,853,000 | 35,218,435 |
| Michigan..... | 9,879,719 | 23,218,000 | 10,680,269 |
| Indiana..... | 3,320,761 | 103,334,000 | 41,833,639 |
| Illinois..... | 5,310,202 | 165,327,000 | 61,171,095 |
| Wisconsin..... | 1,001,738 | 27,347,000 | 10,892,030 |
| Minnesota..... | 896,012 | 24,192,000 | 8,951,160 |
| Iowa..... | 7,074,930 | 200,221,000 | 64,070,566 |
| Missouri..... | 5,505,018 | 152,489,000 | 54,996,040 |
| Kansas..... | 5,952,057 | 145,825,000 | 45,205,873 |
| Nebraska..... | 5,572,523 | 157,145,000 | 44,000,642 |
| South Dakota..... | 794,011 | 17,706,000 | 5,843,127 |
| North Dakota..... | 17,515 | 375,000 | 149,928 |
| Montana..... | 1,080 | 21,000 | 14,364 |
| Wyoming..... | 2,050 | 38,000 | 23,134 |
| Colorado..... | 121,350 | 2,778,000 | 1,109,202 |
| New Mexico..... | 29,250 | 585,000 | 421,200 |
| Arizona..... | 4,850 | 81,000 | 52,894 |
| Utah..... | 8,750 | 18,000 | 91,351 |
| Idaho..... | 1,550 | 26,000 | 17,903 |
| Washington..... | 10,250 | 185,000 | 110,700 |
| Oregon..... | 13,400 | 288,000 | 161,336 |
| California..... | 72,500 | 2,197,000 | 1,208,213 |
| Total..... | 70,626,658 | 1,628,464,000 | \$642,146,630 |

WHEAT.—The wheat crop is slightly above an average one in yield per acre, and in volume was only exceeded in 1891, though the crops of 1880 and 1889 nearly equaled it. The area is estimated at 38,554,430 acres, producing 515,949,000 bushels, valued on the farm at \$322,111,881. The yield per acre is 13.4 bushels and the value per bushel 62.4 cents. In the revision of acreage changes are made in some States in which the decline of the past twelve years has been heavier than had been reported.

The crop is reported in measured bushels. The average weight of the measured bushel will be determined later, but it is probable that the aggregate crop will be equivalent to nearly 500,000,000 commercial bushels.

OATS.—The estimated crop of oats is 661,035,000 bushels, grown on 27,063,835 acres, and valued on the farm at \$209,253,611. The average yield per acre is 24.4 bushels and the average price 31.7 cents per bushel. The increase in oats production during the past decade has been a striking feature in American agriculture.

The Estimates for 1892 by States.

| States and Territories. | WHEAT. | | | OATS. | | |
|-------------------------|------------|-------------|---------------|------------|-------------|---------------|
| | Acres. | Bushels. | Value. | Acres. | Bushels. | Value. |
| Maine..... | 4,500 | 75,000 | \$76,653 | 124,501 | 4,009,000 | \$1,814,019 |
| New Hampshire..... | 2,350 | 38,000 | 38,305 | 28,223 | 980,000 | 422,216 |
| Vermont..... | 8,750 | 151,000 | 144,480 | 106,580 | 3,784,000 | 1,625,944 |
| Massachusetts..... | | | | 15,129 | 480,000 | 220,768 |
| Rhode Island..... | | | | 4,179 | 123,000 | 61,418 |
| Connecticut..... | | | | 24,473 | 619,000 | 278,625 |
| New York..... | 518,837 | 8,405,000 | 7,144,385 | 1,383,183 | 38,729,000 | 15,104,358 |
| New Jersey..... | 124,950 | 1,787,000 | 1,483,032 | 119,287 | 3,686,000 | 1,256,927 |
| Pennsylvania..... | 1,324,063 | 19,331,000 | 15,658,369 | 1,177,146 | 29,664,000 | 11,865,632 |
| Delaware..... | 294,705 | 1,231,000 | 923,374 | 22,152 | 428,000 | 112,468 |
| Maryland..... | 529,684 | 6,992,000 | 5,173,953 | 96,272 | 1,829,000 | 695,984 |
| Virginia..... | 799,069 | 7,591,000 | 5,769,279 | 488,539 | 5,472,000 | 2,183,935 |
| North Carolina..... | 716,942 | 5,090,000 | 4,530,356 | 549,717 | 5,392,000 | 2,399,513 |
| South Carolina..... | 144,316 | 988,000 | 872,390 | 350,679 | 3,682,000 | 1,914,708 |
| Georgia..... | 216,820 | 1,474,000 | 1,326,938 | 569,136 | 6,090,000 | 3,166,673 |
| Florida..... | | | | 47,122 | 463,000 | 254,527 |
| Alabama..... | 45,600 | 306,000 | 284,134 | 364,810 | 3,721,000 | 1,897,742 |
| Mississippi..... | 3,650 | 25,000 | 22,338 | 148,007 | 1,554,000 | 777,017 |
| Louisiana..... | | | | 34,523 | 421,000 | 210,652 |
| Texas..... | 445,085 | 5,475,000 | 4,105,910 | 619,456 | 15,177,000 | 5,767,135 |
| Arkansas..... | 163,058 | 1,387,000 | 1,069,661 | 317,690 | 4,988,000 | 1,965,093 |
| Tennessee..... | 898,915 | 8,540,000 | 5,806,991 | 553,085 | 7,466,000 | 2,837,070 |
| West Virginia..... | 402,077 | 4,302,000 | 3,226,668 | 164,084 | 2,571,000 | 1,176,944 |
| Kentucky..... | 985,977 | 11,635,000 | 7,785,134 | 596,557 | 10,917,000 | 4,039,287 |
| Ohio..... | 2,795,783 | 38,022,000 | 25,854,939 | 1,002,421 | 26,394,000 | 9,733,043 |
| Michigan..... | 1,622,737 | 23,854,000 | 15,982,337 | 963,944 | 27,809,000 | 9,919,397 |
| Indiana..... | 2,713,292 | 89,885,000 | 25,526,651 | 1,100,932 | 29,175,000 | 23,269,518 |
| Illinois..... | 1,751,249 | 28,370,000 | 17,873,247 | 2,854,105 | 75,063,000 | 14,665,867 |
| Wisconsin..... | 766,429 | 8,814,000 | 5,464,639 | 1,674,568 | 50,572,000 | 12,300,512 |
| Minnesota..... | 3,552,626 | 41,210,000 | 25,138,382 | 1,596,190 | 43,573,000 | 24,918,570 |
| Iowa..... | 631,063 | 7,257,000 | 4,354,335 | 3,773,254 | 95,841,000 | 7,227,840 |
| Missouri..... | 1,986,686 | 24,834,000 | 14,403,474 | 1,204,640 | 24,093,000 | 11,461,567 |
| Kansas..... | 4,070,724 | 70,831,000 | 36,831,911 | 1,547,175 | 44,084,000 | 9,920,128 |
| Nebraska..... | 1,253,564 | 15,670,000 | 7,834,775 | 1,615,393 | 43,131,000 | 9,248,630 |
| South Dakota..... | 2,541,348 | 31,767,000 | 16,201,094 | 702,869 | 18,472,000 | 3,502,834 |
| North Dakota..... | 2,868,729 | 34,998,000 | 18,199,217 | 472,690 | 12,510,000 | 764,041 |
| Montana..... | 41,761 | 898,000 | 619,525 | 66,325 | 1,930,000 | 166,280 |
| Wyoming..... | 5,775 | 101,000 | 66,702 | 15,700 | 436,000 | 964,198 |
| Colorado..... | 131,082 | 2,504,000 | 1,452,126 | 98,511 | 2,896,000 | 126,230 |
| New Mexico..... | 37,831 | 515,000 | 412,134 | | | |
| Arizona..... | 10,891 | 170,000 | 132,522 | | | |
| Utah..... | 102,573 | 1,775,000 | 1,100,198 | 27,752 | 735,000 | 294,171 |
| Nevada..... | 6,101 | 117,000 | 87,554 | | | |
| Idaho..... | 76,951 | 1,693,000 | 1,015,753 | 24,631 | 714,000 | 264,323 |
| Washington..... | 523,530 | 9,005,000 | 5,222,735 | 92,282 | 3,184,000 | 1,114,305 |
| Oregon..... | 282,850 | 9,779,000 | 6,255,897 | 244,688 | 6,454,000 | 2,399,176 |
| California..... | 3,012,057 | 39,157,000 | 26,626,584 | 67,821 | 1,987,000 | 794,956 |
| Total..... | 38,554,430 | 515,949,000 | \$322,111,881 | 27,063,835 | 661,035,000 | \$209,253,611 |

Table of Farm Prices, December 1, 1892.

| States and Territories. | Corn—Average price per bushel. | Wheat—Average price per bushel. | Rye—Average price per bushel. | Oats—Average price per bushel. | Barley—Average price per bushel. | Buckwheat—Average price per bushel. | Irish Potatoes—Average price per bushel. | Hay—Average price per ton. | Cotton—Average price per pound. |
|-------------------------|--------------------------------|---------------------------------|-------------------------------|--------------------------------|----------------------------------|-------------------------------------|--|----------------------------|---------------------------------|
| Maine..... | \$0.67 | \$1.02 | \$0.84 | \$0.45 | \$0.68 | \$0.57 | \$0.77 | \$12.80 | ..... |
| New Hampshire..... | .65 | 1.00 | .83 | .44 | .74 | .70 | .85 | 13.20 | ..... |
| Vermont..... | .64 | .96 | .73 | .48 | .66 | .48 | .88 | 10.00 | ..... |
| Massachusetts..... | .62 | .97 | .72 | .48 | .75 | .78 | .83 | 16.60 | ..... |
| Rhode Island..... | .63 | .75 | .49 | .82 | .80 | .85 | .85 | 17.40 | ..... |
| Connecticut..... | .62 | .87 | .73 | .45 | .76 | .75 | .76 | 16.50 | ..... |
| New York..... | .60 | .85 | .65 | .39 | .75 | .50 | .65 | 11.00 | ..... |
| New Jersey..... | .58 | .83 | .62 | .41 | .57 | .57 | .75 | 14.25 | ..... |
| Pennsylvania..... | .57 | .81 | .62 | .40 | .57 | .53 | .72 | 12.30 | ..... |
| Delaware..... | .44 | .75 | .38 | .38 | .60 | .63 | .63 | 12.83 | ..... |
| Maryland..... | .45 | .74 | .62 | .38 | .65 | .68 | .61 | 11.75 | ..... |
| Virginia..... | .53 | .76 | .63 | .39 | .61 | .60 | .60 | 11.50 | \$0.086 |
| North Carolina..... | .54 | .89 | .85 | .45 | .55 | .61 | .61 | 10.55 | .086 |
| South Carolina..... | .57 | .93 | .98 | .52 | ..... | .85 | .85 | 11.30 | .086 |
| Georgia..... | .56 | .90 | 1.00 | .52 | ..... | .80 | .80 | 11.80 | .085 |
| Florida..... | .60 | ..... | ..... | .55 | ..... | .75 | .75 | 14.00 | .082 |
| Alabama..... | .52 | .93 | 1.00 | .51 | ..... | .76 | .76 | 10.80 | .085 |
| Mississippi..... | .51 | .90 | 1.00 | .50 | ..... | .77 | .77 | 9.91 | .085 |
| Louisiana..... | .50 | ..... | ..... | .50 | ..... | .76 | .76 | 9.80 | .084 |
| Texas..... | .45 | .75 | .70 | .38 | .65 | .85 | .85 | 8.56 | .080 |
| Arkansas..... | .47 | .80 | .82 | .40 | ..... | .70 | .70 | 8.74 | .085 |
| Tennessee..... | .43 | .68 | .65 | .38 | .66 | .62 | .48 | 10.40 | ..... |
| West Virginia..... | .56 | .75 | .67 | .41 | ..... | .58 | .58 | 10.50 | ..... |
| Kentucky..... | .40 | .67 | .62 | .37 | .38 | .52 | .52 | 9.50 | ..... |
| Ohio..... | .42 | .68 | .56 | .35 | .57 | .59 | .64 | 9.17 | ..... |
| Michigan..... | .46 | .67 | .53 | .35 | .60 | .49 | .53 | 8.40 | ..... |
| Indiana..... | .40 | .64 | .52 | .34 | .51 | .58 | .72 | 7.80 | ..... |
| Illinois..... | .37 | .63 | .50 | .31 | .49 | .60 | .80 | 7.53 | ..... |
| Wisconsin..... | .38 | .62 | .48 | .29 | .50 | .45 | .54 | 7.65 | ..... |
| Minnesota..... | .37 | .61 | .44 | .22 | .42 | .45 | .48 | 4.60 | ..... |
| Iowa..... | .32 | .60 | .49 | .26 | .40 | .60 | .75 | 5.25 | ..... |
| Missouri..... | .36 | .58 | .50 | .30 | .42 | .65 | .77 | 6.75 | .078 |
| Kansas..... | .31 | .52 | .40 | .26 | .35 | .62 | .88 | 4.40 | ..... |
| Nebraska..... | .28 | .50 | .39 | .23 | .38 | .50 | .75 | 4.27 | ..... |
| South Dakota..... | .33 | .51 | .37 | .23 | .35 | ..... | .55 | 3.40 | ..... |
| North Dakota..... | .40 | .52 | .44 | .28 | .33 | ..... | .40 | 4.10 | ..... |
| Montana..... | .70 | .69 | .68 | .40 | .66 | ..... | .60 | 8.95 | ..... |
| Wyoming..... | .61 | .66 | .67 | .38 | .68 | ..... | .70 | 6.40 | ..... |
| Colorado..... | .40 | .58 | .52 | .34 | .51 | ..... | .61 | 6.50 | ..... |
| New Mexico..... | .72 | .80 | ..... | .56 | .65 | ..... | .80 | 11.25 | ..... |
| Arizona..... | .65 | .78 | ..... | ..... | ..... | ..... | .75 | 10.50 | ..... |
| Utah..... | .58 | .62 | .55 | .40 | .52 | ..... | .72 | 6.31 | ..... |
| Nevada..... | ..... | .75 | ..... | ..... | .61 | ..... | .58 | 7.00 | ..... |
| Idaho..... | .70 | .60 | .50 | .37 | .33 | ..... | .54 | 7.40 | ..... |
| Washington..... | .60 | .58 | .55 | .35 | .45 | ..... | .50 | 9.00 | ..... |
| Oregon..... | .56 | .64 | .60 | .37 | .46 | .75 | .56 | 8.92 | ..... |
| California..... | .55 | .68 | .67 | .40 | .47 | ..... | .59 | 8.76 | ..... |
| General average..... | .363 | .624 | .548 | .317 | .472 | .534 | .673 | 8.49 | .084 |

A Farmer's Experience on the Medicine River.

EDITOR KANSAS FARMER:—The article of J. W. Robinson, in your issue of January 11, is well worth a whole year's subscription. In it he has handed us the key to success or failure in farming. We need more articles like this, every word of which is undoubtedly based upon intelligent experience. On my 1,400-acre ranch down here on the Medicine river, I find I never shall learn all there is to know about farming and stock-raising. It used to be said that any one could make a success of farming, but if this was ever true, it is not true now. A man who can make a success

The Farmers' Forum.

This department is devoted to the discussion of economic questions and to the interests of the Alliance, Grange and kindred organizations.

The Farmers Build Up the Monopolies.

EDITOR KANSAS FARMER:—Whatever may be the true definition of monopoly, it is certain that what are now called the monopolies have been directly fostered and built up by the farming population. They have done this by the great change they have made in their industries or the mode of conducting them. They have abandoned the methods of independence and adopted those that tend directly toward placing them and their business in the power of middlemen. Formerly, when there was a piece of wood land on the farm it was faithfully taken care of, only the refuse and trimmings used, that the forest might be developed and become of more use. Now, since the theory is that it is "cheaper to raise corn and burn coal," the timber is neglected or rooted out, no groves planted, and the farmer becomes directly dependent on the coal companies. The farmers of Kansas might have all the fuel they could use in a few years by planting trees of the right kind and in the right place. But they prefer to be dependent on the coal companies, and they need not be surprised at the increase of "coal barons" nor their extortions.

Again, years ago—not so very many either—the farmer slaughtered his hogs, took care of all he wanted for his own use and sold the rest, dressed. It is, to be sure, very much easier and pleasanter and requires much less skill to sell all the hogs, live weight, and buy back the cured meats, but this is the very thing that has built up Phil Armour and the other great meat princes. The farmers have done it themselves, and when they see Armour pour out a million dollars for an industrial school in Chicago, they may have the satisfaction of knowing that that is their money and that it is going to train hoodlums in Chicago while their own sons and daughters are growing up in industrial ignorance.

Kerosene is a vast improvement over tallow candles, but when the farmer abandoned the killing of bees and the use of their tallow for light, and began to use coal oil, he laid the foundation for the great Standard Oil "monopoly." And instead of the wealth remaining scattered among the farmers, it is gathered in the hands of John D. Rockefeller and a few others. Mr. R. may do some good with it; he may found and endow a great university, but its advantages will be mainly for the city people and the rich. The money will not get back to the farmers.

No institution has done more to build up immense fortunes than the railroad systems of our country. True, the roads themselves may often be embarrassed and even bankrupt, but there are men behind somewhere who are becoming millionaires. The farmers have built up the railroads, not only or mainly by wild voting of bonds, but by the system of agriculture they pursue, which makes them directly dependent on the means of transportation.

I have no very great faith in the cure of any of these evils by any sort of politics. It is not politics that has been making the "rich richer and the poor poorer," to any great extent. It does not make so very much difference what the system of currency is if you systematically let the other fellow take the advantage of you or put yourself in a position where, even if he is honest, he has such advantage. The law of supply and demand is above politics. When a man deliberately and systematically gives away what he produces, what could politics do in the case? When a man systematically puts himself into a position where he has only one or two things to sell and must buy everything he needs, and both in buying and in selling, must, in the nature of the case, take the other fellow's prices, how can politics or political economy or anything else save him from being "skinned"?

Farming is a business of a radically different kind from others, and must not be judged by the rules that pertain

to others. Its great object should be made not money but wealth. The two are not synonymous. Many a man in Kansas is struggling to get money and failing, when the acquirement of property and livelihood and competence are within his grasp if he would but seek them.

While not all the "modern inventions" must be discarded, the farmers of the future, if successful, must, to a certain extent, take the back track. They must diversify their agriculture, take care of the little sources of income and train themselves and their children to a degree of domestic manufactures. The only really successful farmers I know are those who have, to some extent, pursued this course. Neither national protection nor free trade can remedy the agricultural evils now complained of. There is not on the face of the earth a greater humbug than this tariff-free-trade agitation. It is a humbug on both sides, all around. It does not get down to the true inwardness of the situation. The only thing that will avail is a judicious use by the farmer of all his resources, both his land and his labor, so as to provide for as many of his wants as possible at home—to make himself independent and enable him to play successfully upon the law of supply and demand.

Douglass, Kas. T. C. MOFFATT.

The Effects of Speculation on Prices of Wheat.

EDITOR KANSAS FARMER:—I want to bring Mr. C. Wood Davis back to the plain facts and clear away the clouds with which he has obscured them. He has sought to cast doubt upon some of my statements by seeming to deny them, when he does not really do so. He does not deny, though he pretends to, that Kansas hard wheat sells for as much as No. 2 red wheat of corresponding quality and position, in Liverpool. He does not deny, though he pretends to, that No. 2 red wheat sells for several cents more than Kansas hard wheat of corresponding quality and position, in Chicago. And he does not deny, though he pretends to, that the higher price of the No. 2 red wheat in Chicago is due to the fact that it is a speculative grade of wheat, whereas the Kansas hard is not. He seeks to make us believe that buyers are enabled to obtain at a cheaper price, four-fifths of a given quantity because one-fifth is held by speculation above their reach, than they would have to pay for the four-fifths if the entire quantity were offered for sale to them. If five men are seeking to buy five bushels of wheat, will they pay less for four bushels because one bushel is temporarily withdrawn from market, than they would pay for the four bushels if the five bushels were offered to them on even terms at the same time? Mr. Davis tries to make us believe so, but he is too close a reasoner to believe such an absurdity himself.

To state that the price of Kansas hard wheat is depressed by the fact that speculation holds the price of No. 2 red and No. 2 spring wheat so high that it cannot be used by exporters at all, is to state an absurdity. Mr. Davis knows perfectly well that when he asks, "Has not the price of hard Kansas wheat been abnormally depressed by the rules of the exchange?" he is seeking to evade the direct issue through a dishonest subterfuge. The rules of the exchange have nothing to do with hard wheat. The price of hard wheat depends upon what the exporters and millers will pay for it. And if great quantities of wheat which are available to fill speculative contracts are taken out of direct competition with the Kansas hard wheat, the demand for the latter will certainly be increased and the price consequently advanced.

Certainly the farmer is interested in having as great a demand for his crop of wheat as possible. Why should he care whether that demand comes from the exporter, the miller, or the speculator? Every increase in the demand means an increase in the price of his wheat. The facts show that the present system of speculation always results in an increased demand for grain, artificial though the demand may be, at a time when it is most

needed. Mr. Davis' fine-spun theories and hypothetical case may seem to prove the contrary. But the facts are as I have cited them, and they cannot be evaded.

I am too well acquainted with the value of space in a newspaper to ask you to print a reply to the absurd, inconsistent and foolish things which Mr. Davis has said about myself. There is no need of it. I have made no statements, the value of which depend upon my reputation. Mr. Davis did not deny my statements. He simply sought to make your readers believe that he denied them. On the other hand, some of his statements are denied outright. That makes perfectly proper a discussion of his "fitness to deal with the subject." And it seems to me that my evidence in this case fully offsets his.

H. L. NICOLET.

Kansas City, January 14, 1893.

All who are troubled with Constipation will find a safe, sure and speedy relief in Ayer's Pills. Unlike most other cathartics, these pills strengthen the stomach, liver, and bowels, and restore the organs to normal and regular action.

Publishers' Paragraphs.

Alneer Bros., Seedmen, Rockford, Ill., who have an advertisement in this issue, enjoy the full confidence of the seed buying public. So they should, as they are reliable and fill orders promptly.

The special attention of our readers is called to the advertisement of the Iowa Seed Co., Des Moines, Iowa. This company has this year issued one of the finest catalogues ever sent out by a Western seed house and they offer to send one free to every reader of this paper.

The Iowa Seed company, Des Moines, Iowa, sends us one of the finest catalogues we have seen so far this year. The covers are lithographed in eight colors. It is replete with illustrations, and has two handsome colored plates. This firm is making a specialty of high-grade field seeds for farmers, something which has hitherto been entirely too much neglected.

The Alliance Seed House in western Kansas, although yet a young institution, has achieved a marvelous success in building up a large patronage in nearly every Western State, simply by giving good seeds at low prices to the people. Look up their advertisement elsewhere, mentioning this paper. Write for prices, addressed to the Alliance Seed Co., Gove City, Kas.

Mr. Sven O. Thompson, a farmer of McPherson county, has received letters patent on a new style of feed-rack, which can be built suitable for feeding cattle, horses or sheep. It can be erected around a hay stack or a straw stack, or the stack can be built in it. It is so constructed, by sliding connections, that it will contract its area by the external pressure from the live stock feeding therefrom until the stack is nearly consumed, while waste is prevented and the food is kept in clean condition. He wishes to develop the trade in this patent on a certain plan, and to this end he wishes to employ a competent man to take charge of its development. Look up his advertisement.

We are in receipt of a seed catalogue published by F. B. Mills, Rose Hill, New York, whose advertisement appears in another column. Mr. Mills has a very novel idea in getting up his catalogue. With every order amounting to \$1 or more he allows the customer to select 50 cents worth of seeds in packages free, their own choice. Thus you see every one gets \$1.50 worth of seeds for \$1. Aside from this he offers some very large and interesting premiums. He offers one of the finest lines of vegetable and flower seeds that can be found and prices are very reasonable. If anything is not satisfactory, Mr. Mills guarantees to make it so, and we would advise our readers to send for a catalogue.

F. Barteldes & Co.'s Kansas Seed House has become a household word in thousands of farmer's homes in the great West. This firm has done an extensive business in Kansas and adjoining States for thirty-two years, and their fine large catalogue for 1893 offers greater inducements than ever. These gentlemen make a specialty of just such seeds as experience has proven to do well in our soil and climate. Their seeds are all tested with the greatest precaution, and are reliable, fresh and genuine. This reliable firm guarantees accurate weights and measurements, and safe arrival of all seeds sent by mail or express. See advertisement elsewhere in our columns, and don't fail to send for catalogue.

The Twice-a-Week St. Louis Republic, will be sent free for one year to any person sending, before March 1, 1893, a club of three new yearly subscribers, with three dollars to pay for the same. The Republic goes everywhere and is the most popular

"August Flower"

The Hon. J. W. Fennimore is the Sheriff of Kent Co., Del., and lives at Dover, the County Seat and Capital of the State. The sheriff is a gentleman fifty-nine years of age, and this is what he says: "I have used your August Flower for several years in my family and for my own use, and found it does me more good than any other remedy. I have been troubled with what I call Sick Headache. A pain comes in the back part of my head first, and then soon a general headache until I become sick and vomit. At times, too, I have a fullness after eating, a pressure after eating at the pit of the stomach, and sourness, when food seemed to rise up in my throat and mouth. When I feel this coming on if I take a little August Flower it relieves me, and is the best remedy I have ever taken for it. For this reason I take it and recommend it to others as a great remedy for Dyspepsia, &c."

G. G. GREEN, Sole Manufacturer,
Woodbury, New Jersey, U. S. A.

paper published in America. Its readers get the news half a week earlier than it can be had from any weekly paper, while its Literary, Agricultural, Women's and other departments are unsurpassed. It fills the wants of every member of the family, and should be read in every household. You can get three new subscribers for it by a few minutes' effort. Try it, at once, and see how easily it can be done. If you wish a package of sample copies, write for them. Cut out this advertisement and send with your order. Address The St. Louis Republic, St. Louis, Mo.

An educational trinity of H's is the ideal of *The New Education*, a new magazine to appear this month. It calls for a "full-orbed education," the education of head, of heart, and of hand, to take the place of the traditional three R's; or perhaps to make possible and fully efficient the teaching of the R's—and something more. *The New Education* holds that the mission of all education is to prepare for life, to help children grow in the right direction and develop into full efficiency all the possibilities of their being. It expects to be helpful in the home, the kindergarten and the school. To all of these it will furnish suitable material and suggestions; methodical courses of procedure, working programs, manual and intellectual occupations, stories, songs, games, studies of child-growth and of child nature, discussions of various methods of training and teaching, of guiding the children in play and in work. The magazine will be conducted by Dr. W. N. Hailmann, Ph. D., Froebel's translator and the author of well-known pedagogical works. Simpson & Co., 841 Broadway, New York, are the publishers.

They Are All Right.

At the request of the proprietors our Chicago manager, Frank B. White, has visited and inspected the evergreens offered so cheap by the E. H. Ricker Co., proprietors of the Elgin Nurseries, Elgin, Ill. Mr. White found acres of small evergreens of all sizes and ages of the best quality; and how any firm can afford to send out 200 two-year-old evergreens for \$1 is a mystery. The firm say it is not the profits on the sample orders they are after; past experience has proven that a sample order of evergreens sent into a neighborhood more than serves the purpose of the best advertising they can do. In their \$1 sample order they send 100 Norway spruce, 50 White pine and 50 Scotch pine. In their \$5 sample order they send 100 each of Norway spruce, White pine, Scotch pine, Austrian pine and American arbor vitae, 25 blue spruce and 10 Ponderosa pine, making 535 trees, all two years old, and express prepaid. We advise our readers to send for their thirty-six page catalogue and how to grow evergreens, illustrated. It is free to all for the asking. Send postal address to the E. H. Ricker Co., Elgin, Ill.

Wanted.

In every county in Kansas, a first-class man as agent to represent the Kansas Mutual Life. Address

J. P. DAVIS, President,
Topeka, Kansas.

Well Machinery Send for illus. cat'g. Peck Mfg. Co., 60 4th St., Sioux City, Iowa.

The Horse.

Horse Market Reviewed.

KANSAS CITY.

The supply of horses was only fair with more than the usual number of buyers, both local and foreign. The demand for big mares was better than at any time during the past season. Good smooth Southern stock and shapely drafts were \$5.00@7.50 higher; streeters sold \$2.50@5.00 above last week. The three days auction has proved quite a success, and stock continues to arrive up till Thursday noon with just as fair prospects for good prices as those on the market Tuesday and Wednesday. There is still quite a local demand for good 1,500 to 1,600-pound draft and express horses. The run of Western branded horses was light with little or no demand. The buyers were from all over the South and East, quite a number from the wheat districts. Prospects for the coming week are good for the tops of all grades. Plugs continue low and a drag on the market. The bidding at Thursday's auction was as prompt and active as on Tuesday or Wednesday, and prices were equally as high.

| | |
|------------------------------|-----------|
| Draft, extra, 1500 lbs. | \$125@175 |
| Draft, good, 1300 lbs. | 85@115 |
| Drivers, extra. | 120@210 |
| Drivers, good. | 75@ 95 |
| Saddlers, good to extra. | 75@175 |
| Southern mares and geldings. | 35@ 75 |
| Cav-lry. | 20@100 |
| Western range, unbroken. | 20@ 50 |
| Western range, broken. | 30@ 80 |
| Matched teams. | 15@300 |
| Western ponies. | 10@ 20 |

Private sales were as follows: 8 draft at \$130; 6 drivers at \$110; 8 streeters at \$83; 22 Southern at \$58; 4 chunks \$95.

MULES.

The trade in mules continues active; supply rather light. Prices on 14½ to 15½ fully up to quotations. Big mules rather quiet.

| | |
|---------------------------------|----------|
| 14½ hands, 4 to 7 yrs. | \$55@ 70 |
| 14½ hands, 4 to 7 yrs. | 75@ 85 |
| 15 hands, 4 to 7 yrs. extra. | 95@110 |
| 15 hands, 4 to 7 yrs. good. | 80@ 90 |
| 15½ hands, 4 to 7 yrs. extra. | 125@135 |
| 16½ hands, 4 to 7 yrs. good. | 110@120 |
| 16 to 16½ hands, good to extra. | 130@165 |

Less Hay for Horses.

Hay in the manger all the time results in serious disorders; the animal's system is deranged and often broken down. A young horse, weight less than 1,000 pounds, is sound, yet a sluggish traveler ordinarily. Months ago a neighbor told me I fed him too much hay. I replied that I thought not; that he got only half as much as my other horses. Lately I discovered he should not have one-quarter as much. It came about thus: My own oats having been all fed, I was buying. Oats were dear, and ground oats suspiciously full of hulls. I reasoned whether I could not compound an honest and cheap ration from wheat bran, oil meal or cottonseed meal and corn meal for all my horses. I wrote Prof. E. W. Stewart. He replied that for roadsters oil or cottonseed meal 2 parts, corn meal 2 parts, and bran 6 parts, with 10 parts of cut hay or straw, all by weight, was about right for twenty-four hours in three feeds. Well, I stopped buying oats, and have saved money. But I have done more—the particular horse mentioned has improved as a driver and continues to improve. He looks and acts more ambitious and has better disposition. For this I credit myself. The weighing led me to try less and less hay, while not increasing the grain ration, with the above favorable result. The horse has good appetite and only a small stomach. As a consequence he was uncomfortable, cross and indisposed while on the road. Now I am not only saving money in grain, but in hay, and have a better driver.

A short time ago a valuable horse, an imported draft stallion, was fed all the hay he would eat with dire result. It took an experienced horseman months to correct the mischief done by a season's stuffing with hay. Since that severe lesson we have had constantly the care of work horses, and have found that fully as good results in feeding were had where good bright straw, of which the animals ate little, was used for roughness and variety, but no greater quantity of grain was fed them when hay was a large and constant part of the diet. An opportunity to inspect the feeding of horses in a large stable belonging to a street car company revealed the fact that the horses, required to make twenty-four miles per day at a jog trot, in heats of six miles each, were fed almost entirely a grain diet, being given only enough hay to secure good digestion. The common ration was crushed corn and wheat bran mixed by weight and the whole mixed with coarse cut hay. Of this about half a bushel was fed dry at one mess. Whole hay was sometimes fed, and the grain ration was varied to maintain vigorous appetite. With this feeding the horses were kept in excellent condition under the constant and severe labor of the car service. All similar observations of scientific feeding and my own experience confirm me in the belief that farmers could get better service out of their teams, and at the same time keep them in better condi-

tion by feeding less hay and without increasing the quantity of grain.—Omaha Stockman.

Our First-Page Illustration.

Our first-page illustration is of that great black Percheron show stallion, Louis D'Or (28635) 14596. He is a son of the great show horse Fenlon by Brilliant (755). This makes him the most fashionable bred Percheron of to-day. Louis D'Or is a great, massive, thick horse—a regular Dutchman of the best quality—smooth and round as an apple, with great heavy, flat, clean bone and good feet, and the style and carriage of a Chesterfield. He is the largest stallion of quality in pounds (weight 2,360), and trots off like a coacher. This great horse is at the head of Iams' Percherons, and the rich blue blood of his veins makes him a winner wherever shown. He won first prize at the largest show of France as a two-year-old at La-Ferte-Benard, first prize at Nebraska State fair, and first prize at the great St. Louis fair of 1892 with five of his get. This is the type of horses at Iams' stud of Black Percherons, French Draft, Clydes and Shires. His imported horses are all full-bloods. Every horse has passed the customs free of duty, and every one approved by the government. Mr. Frank Iams, of St. Paul, Neb., has 100 head of pure-bred horses of first-class quality, and at low prices. Terms: One, two or three years time at 5 per cent. interest, and Iams pays the freight. If you want a "topper," go and see Iams' horses. His horses won 141 prizes at the leading State fairs.

Imported Stallions Sacrificed.

On account of my fast failing health, which almost totally prevents me from attending to business, and will cause me to seek some other clime more conducive to my health, for an indefinite time, I have decided to close out my extensive importing business; and, in order to do so, I will be obliged to make a great sacrifice. But I regard my health as more important to me than money, and, in this case, I am going to offer you an opportunity which only occurs once in a life time—to get as fine an imported stallion as there is in America for nearly one-half price.

In order to illustrate more fully, I will sell you the same horse that I offered for \$1,600 for \$1,000, and the same horse that I offered for \$1,200 I will now sell for \$800.

Now I am doing this at a fearful sacrifice and one which I can ill afford, and must necessarily lose thousands of dollars by so doing, but, as I said before, the condition of my health simply forces me to make the sacrifice, and according to the old proverb, what is my loss will be your gain, provided you will embrace the golden opportunity, which I have not the least doubt you will certainly do. So please come at once and see my stock and get the first choice before others have had time to make selections.

This offer I will hold good for thirty days. So please let me hear from you by return mail, stating just when you can come, for this is an opportunity you cannot afford to neglect, and one which may never present itself to you again. Come and see me and get my lowest prices. I am, yours most truly,
WILLIAM AUSTIN.
Emporia, Kas.

Henry Avery's Horse Farm.

The KANSAS FARMER takes pleasure in presenting to its readers some of the observations made by its representative during a recent visit at the horse farm of Mr. Avery, of Wakefield, Kas.

The place consists of 640 acres, in the Republican river valley, and is perhaps the best situated, being surrounded by timber and hills providing the best of natural protection, of any stock farm in the West.

From the best information obtainable, Mr. Avery brought the first imported Percheron horse in the State of Kansas, and shortly thereafter laid the foundation of his Percheron stud with several prize-winning imported brood mares.

There are now on the farm one hundred and twenty-five head, all ages, including ten aged stallions. A major portion of the two and threes are the get of Waterloo 16th, who won first in class and sweepstakes at the Kansas State fair three years ago, where individuals from five States competed for both honors.

This excellent stallion weighed over 2,000 pounds and his pedigree traces down a long line of successful prize-winners in the Percheron horse history of France. For the past year Brilliant III. 11116 (2919), the winner of first place at the great annual show in France of 1888, has been at the head of the harem. He was sired by Fenlon 2682 (138), dam Blue by Brilliant (899). He cost the American importer on his native heath \$4,000, and has held a top place among the kings of the show yard in this country.

The yearling and weanling French Coachers found in the paddock were sired by the four-year-old stallion Ravenstein 421, bred by M. Pierre Luce, of Etienneville, department of La Manche; got by the government stallion Colporteur; dam Vapeur

by Useful; second dam by Seduisant; third dam Riga. He shows up a line of breeding that attracts the attention of all well-posted horsemen and the individuality of his get confirms his usefulness as a sire of great merit.

In conclusion will state that the barns, the complete steam milling arrangement adjoining his granary, and the general arrangement of the farm, all betokens that Mr. Avery's thirty years' of experience as a horse breeder has been successful and that he is in the business to stay.

Coad's Nebraska Horse Farm.

The FARMER takes pleasure in calling the attention of its readers to the advertisement of Mark M. Coad, breeder and importer of Percheron and French Coach horses. There is perhaps no breeding farm in all the West where better individuals may be had—just what the prospective horseman wants. A more extended write-up will appear in a future issue.

Annual Sale Trotting Stock.

The second annual sale of standard and high-bred trotting stock of Grant's stock farm, will be held at Oswego, Kansas, February 21, 1893. The offering consists of stallions, brood mares, several fancy single drivers and a few nice matched teams. For catalogues or other information address the proprietor, J. M. Grant, Oswego, Kas., or Col. S. A. Sawyer, auctioneer, Manhattan, Kas.

The Extra Horse.

By French law, on every highway in France, and on every street which has a steep grade, there is stationed at a point where the rise begins, an "extra horse." The law compels the use of this horse until the summit of the hill is reached, and there is a heavy fine for refusing to hire the extra, at a small fixed rate.

A playcard by the roadside indicates the point where the extra horse must be taken on and another, higher up, shows where he may be dispensed with. All truckmen and other teamsters in large cities pay strict attention to this regulation, framed in the interest of toiling animals.

Gossip About Stock.

Julius Peterson, Lancaster, Atchison county, Kas., claims April 13, 1893, as his date for a public sale of Short-horn cattle.

Remember the second annual sale of trotting stock to be held at Oswego, Kas., on February 21, by J. M. Grant. Catalogues now ready.

L. A. Knapp, Maple Hill, writes: "About a month ago I bought a No. 1 feed-mill of the Blue Valley Foundry Co., of Manhattan, and it gives me better satisfaction as a crusher than any mill I have tried. Whatever others may think, I like the cob ground up with the corn, when it is ground sufficiently fine. In that respect this mill is a success so far as I have used it. Some feeders think it a waste of labor to grind corn for calves. I differ."

Wm. B. Sutton, Rutger stock farm, Russell, Kas., has sold Rutger Alcyone 14939, sired by Alcyone 227, dam Abbess, great brood mare. This colt is half brother to Martha Wilkes 2:08. He comes to Topeka, having been bought by Messrs. St. Clair, Fleming and R. F. Atwood, of Topeka. The price paid is \$5,000. A five-months-old colt, sired by Alcantara 2:23, dam Carlotta Blizzard, second dam Carlotta, great brood mare. He goes to Massachusetts. Price, \$1,250.

The committee appointed by the Illinois Sheep Breeders' Association, held in Springfield, December 14-15, 1892, met on January 11, 1893, and by authority given them adopted by-laws and named officers as follows: President, C. I. Pulliam, Chatham; Vice President, W. T. Potts, Jacksonville; Secretary and Treasurer, Jno. G. Springer, Springfield. Executive Committee—Hon. David Gore, Carlinville; S. E. Prather, Springfield; R. J. Stone, Stonington; Harry Cass, Buffalo Hart.

We call attention to Mr. G. G. Steketee's advertisement in this issue. Mr. Steketee will do just as he agrees. It is perfectly safe to send money to him. Mr. S. claims to have one of the best remedies for hog cholera and the only sure remedy for pin-worms in horses. If your druggist does not keep this remedy, then send direct to Mr. S.; but try your druggist first, and save expense. It is no humbug.

The Illinois Short-horn Breeders' Association held their annual meeting in Springfield January 11. President C. C. Judy, in his annual address, presented many points of interest to stockmen. Mr. Alvin H. Sanders, of the Breeder's Gazette, Chicago, presented a paper on the "Future of the Fat Stock Show," indicating that the show of fat stock would be the great feature in coming shows. This paper was received, as it deserved to be, with marked attention. The officers elected for the ensuing year

For A Horse.

For accident, too hard work, and skin diseases, Phénol Sodique does wonders. For all animals and human flesh.

HANCE BROTHERS & WHITE, Philadelphia.
At druggists. Take no substitute.

are: President, C. I. Pulliam, Chatham; Secretary, J. D. Smith, Jr., New Berlin; Treasurer, W. T. Potts, Jacksonville. January 9, 1894, was selected for the next annual meeting of the association.

The American Berkshire Association has paid special premiums, ten volumes of the American Berkshire Record, valued at \$10, for best sow and pigs exhibited at State fairs in 1892, to I. J. Williams & Son, Muncie, Ind.; V. B. Howey, Topeka, Kas.; F. A. Scott, Huntsville, Mo.; Wills A. Seward, Budd's Lake, N. J., and Terrell & Harris, Terrell, Texas. When it is considered that these premiums have been paid by the American Berkshire Association, notwithstanding that all of the conditions of the offer were not complied with, this association must be given credit for being liberal with its patrons.

Wm. Benninger, of Walnutport, Pa., has secured the fine show bull of M. E. Moore, Cameron, Mo., to head his herd, Empress Josephine 3d's Consolation. The show ring record of M. E. Moore's herd in 1891 was every grand sweepstakes dairy herd prize at the Western State fairs. This bull was at the head. He captured first prize at Creston, Iowa, first at St. Paul (Minn.) State fair, first at St. Joe and Kansas City expositions, 1892. His dam, Empress Josephine 3d, captured every first prize for butter at the Western State fairs. At Kansas State fair she made in public test 65 pounds 1 ounce milk in one day, making 2.62 pounds butter fat, the largest ever made in public test by any cow of the breed. Mr. Moore has also secured from Mr. Benninger his fine show bull Parthena's Sir Henry. The dam, it will be remembered, is the fine cow Parthena, Mr. Moore sold for \$2,000, and whose butter record for seven days is 38 pounds 8½ ounces, the largest for her age of any cow of the breed. She won butter sweepstakes at Detroit exposition, 1889, and was a member of the first prize herd. She won first prize and sweepstakes and was a member of the first prize herd at Kansas City exposition, 1890. Mr. Benninger writes: "Parthena's Sir Henry has been in the show ring at eight fairs, 1892, and won six prizes. He headed the herd that won the gold medal at Nazareth, all breeds competing. He was also at head of herd that took first prize at Allentown, Bloomsburg and Pottstown." Mr. Benninger advertises Parthena's Sir Henry butter and milk king of the world.

A Prosperous Life Insurance Company.

We are pleased to note the very prosperous condition of the Kansas Mutual Life, of Topeka, as shown by the following summary:

| | |
|-------------------------------------|---------------|
| Assets January 1, 1893. | \$ 191,829.27 |
| Gain of assets during 1892. | 31,172.89 |
| Death claims paid in 1892. | 66,500.00 |
| Total death claims paid to date. | 403,500.00 |
| New insurance issued in 1892. | 2,496,000.00 |
| Insurance in force January 1, 1893. | 8,519,500.00 |

In addition to the above excellent showing, it is worthy of note that on the 1st of January, 1893, the Kansas Mutual Life had not a single death claim reported and unpaid, thus sustaining its record for prompt payment of death losses and satisfactory settlement of all claims.

It is gratifying to the people of Kansas and the entire West that right in our midst there is a life company the peer of the best in the United States.

Besides enjoying a remarkably healthy growth, and being financially strong, the Kansas Mutual Life issues policy contracts that are models of simplicity and liberality. Its limited payment life and endowment policies have large paid-up insurance and cash values written in the contract, and available at the end of the third and each subsequent year from date of issue. They also participate in annual dividends, rendering the cost low. No better policies or company can be found anywhere.

Blossom House.

Kansas City, Missouri, is convenient to all parts of the city. The Blossom House is the tallest building just across the street from the Union depot, and a splendid meeting place for the farmers and stockmen from all parts of the country, who are usually found there. It seems to be the headquarters and general place of meeting for all Kansas men when attending conventions or bringing stock to that market. It certainly deserves the business from Kansas that it is receiving.

The Home 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.

Written for the KANSAS FARMER.

Wayne Goodwin.

BY MISS MARY E. JACKSON.

Wayne Goodwin and his fair young bride
Were lingering near the river's side.
Their hands were filled with fragrant flowers
They'd gathered there in morning hours.

Cast them here, said the loving bride;
'Twill bear them on to the ocean wide.
These beautiful flowers from you and me
Will cheer some heart on the deep blue sea.

No, my darling, it cannot be;
These flowers gathered by you and me,
So beautiful now on our wedding day,
We'll keep them ever,—lay them away.

Guarding them, too, with watchful eyes,
For oft "Old Time," as he onward flies,
Gathers the garlands from the careless hearts,
Giving to others, then love departs.
Topeka, October 30, 1892.

CURIOUS FACTS ABOUT NEEDLES.

As matter of fact, the art of needle-making was kept secret until about 1650, when it was revealed by Christopher Greening. In the little town of Redditch, a few miles from Birmingham, the needle-makers still ply their trade for all the world. Twenty thousand people make over a hundred millions of needles a year. From the ugly pig of iron to the fairy-like needle are manifold processes, but probably the drilling of the eye is the most interesting of all. The experts can easily perforate a hair, and thread it with its own end. The steel wire is cut into the length of a bristle, and the needles are born as twins, heads together, feet furthest apart. In the old days the ends were sharpened at a cost of life that made this industry more deadly than war. The "grinders' asthma," by which strong men's lungs were inwardly ground to pieces by inhaled particles of steel, slew tens of thousands of strong men. Now, a blast of air away from the grindstone makes a grinder's life a first-class risk for insurance companies. Tempering, annealing, and polishing are all worth seeing in the process.

So easily and cheaply can English needles be made and exported, that on our American tariff needles stand on the free list. We have no hand-needle industry to be protected. We still depend on John Bull and the gentleman who wears the spiked helmet.

But do not our Yankees, who invent, who harness the rivers, the lightning, and the child of wedded fire and water to do their work, make any needles?

Yes; for it was the Yankee who made the needle turn a somersault. All the world since the first fig-leaf-sewers threaded the needle in one fashion. It was the Yankee who discovered that it was threaded at the wrong end. He declared the business end of a needle to be, like that of a bee, farthest from its head. Either Elias Howe, or the other man, who did not win the lawsuit, was the first man who, like the hero in Greek mythology, held the "eye" in his hands, and put it where he would. He drilled the needle and inserted the thread at the other end, and set it in arms of steel, multiplying its potency. As America gave the world the sewing machine and a new kind of needle, so they manufacture this sort and this only. At Springfield, Mass., the National Needle Company make and finish every year thirty million machine needles. Prussia, the great War Power, put a spike on her helm and a needle in her gun, and with the latter humbled Austria. The United States, which, as President Arthur declared, is the Great Pacific Power, put her needle in frame and treadle to lighten toil and clothe the naked. Probably there is a true parable here.

"As naked as a needle" is an old proverb, yet, though nude and limbless, the needle has features and anatomy. Yet all the world does not see eye to eye, as their terms and description show. Missionaries who translate the gospel, in which a camel and a needle, a rich man and the kingdom of heaven, meet only to separate, must keep their own eyes open. The translator of the Korean New Testament had to write, "It is easier for a camel to go through the ear of a needle." And this, though the Koreans, like the Japanese and unlike the Chinese, wear no ear-rings. The ear of the needle! Ha! ha! what gossip could the steel give to a tongue, had it one?

In English literature how often the needle shines! The open book of London street names—a volume of English literature in itself—tells of Threadneedle street. There were three needles in the arms of the Needle-makers' Company of London, but "the Old Lady of Threadneedle street" is the Bank of England. All England, took up Cobbett's epithet, which stuck to this

Mrs. Partington of his time. Does not Dr. Marigold call a bank note "a silver curl paper which I myself took off the shining locks of the ever-beautiful lady?" From great Shakespeare to the poet of "Sunset and Evening Star," the shining inch or two is often mentioned. Even in politics and controversy an act of Parliament is only "the needle to draw in the thread" of the new measure. Proverbs also and folk-lore locate the needle in strange places. Was the swain popping the question when the haystack was made the symbol of useless search? Is there not more of paganism than of Christianity in the name "devil's needle" given to the dragon fly? Are not our first parents and their limitations pictured in the term bestowed upon the thorns and fibres of the yucca-plant, of "Adam's needle and thread," while another velvety leaf is named "Adam's flannel?"—Harper's Bazar.

The Care of Lamps.

In nine cases out of ten—and most likely much more generally even than that—the complaints which are heard regarding the deterioration of the lamps of a household are wholly unjust—to the lamps. The fault is not theirs, nor that of their makers; but simply of those to whom their use and care have been entrusted. Neglect ruins everything, and lamps are no exception. The lamp should be kept clean; not merely on the outside, but as a whole. In fact, the interior is of the most importance, if the matter of a light supply is considered. A lamp may give an excellent quality of light, even though the exterior be hidden by dirt, if only "the department of the interior" be right. How that desirable object may be accomplished is a subject well worthy a brief dissertation.

In any case, they are to be filled. This should be done daily, in order to keep the fount supplied with oil. A lamp may burn when the oil is low, but the combustion will necessarily be carried on under difficulties, and it is admitted that if any danger of accident exists in connection with the use of a lamp, it is much more liable when the oil supply is low. But it is not sufficient simply to go on, day after day, replenishing the supply of oil. At least once a week, where the lamps are in daily use, the residue should be emptied from the bowl, and the lamp should be filled with fresh oil. The oil should be thrown away. It has become dirty, foul, heavy, and is no longer fitted for illuminating purposes. It might be used for kindling fires, if that dangerous practice is allowed, but the days of its excellence have passed. The wick is to be trimmed, the chimney cleaned, and the outside of the lamp carefully wiped before the work is to be considered complete and the lamps set away.—Good Housekeeping.

Use Borax.

To Clean White Lace.—To a pailful of hot water, add one tablespoonful of powdered borax; place the lace in and let it remain for a few moments, then wash in the same water, gently with the hands, using very little soap. When quite dry, rinse in one clear, hot water; squeeze or press the water out,—do not wring it. Place the lace, if a small piece, inside of a clean, folded towel; if a large piece use a sheet, and with the cloth well wrapped around the lace, gently wring as much of the moisture out as possible. Place a clean towel or sheet on a table, and with very clean hands straighten, or stretch the lace to its original shape. Pick out all the edges, points, etc.; it will become perfectly dry while doing so. If the lace is very large or hard to dry, pin it down on a clean board, sticking pins into every point or loop; use no starch; do not iron it or hang it up to dry.

To Remove Grease Spots from Silk.—Place some coarse, brown paper (the soft kind) on both sides of the spots, then press carefully with a hot iron. Change the paper often, as it absorbs the grease. If the goods are so rich, or delicate, that the iron is likely to injure them, try friction by using raw cotton; rub the spots off, changing the cotton often. If the material is soiled or stained in many places, rip the article and wash it in tepid water softened with pulverized borax. It can be made to look as good as new.

To Clean a Brussels Carpet.—First, have the carpet well shaken, then tack it down in a room where it is to remain, and sweep it as thoroughly as possible. Take a pail of hot water, put in two tablespoonfuls of powdered borax; wash the carpet all over the surface, using a flannel cloth. For grease spots or very dirty places, use a scrubbing brush freely, and a very little soap, taking care to rinse the soap off well after scrubbing. Change the water quite often. Rub the carpet well after washing, with a dry cloth, and open the doors and windows so as to dry it as quickly as possible.

To Clean Black Lace.—Place the lace on a clean table; have one teaspoonful of powdered borax dissolved in a quart of hot water; take a soft brush and use the borax water freely. After all the grease spots or soiled places have been removed, use plenty of warm water with a sponge. Go all over



Doctors and other people like the Ivory Soap because of its simplicity. Being a pure natural soap it is not necessary to conceal its quality with strong perfume, coloring matter, or tar.

Dr. James C. White, of Boston, Professor of Dermatology (which treats of the skin in health and disease) in Harvard University, says:

"In selecting soaps for the toilet, those which are white and mostly free from scents should be chosen, for impure materials in their manufacture may be easily disguised by strong odors and colors. There is no positive virtue in Castile Soap, as is so generally supposed, nor in carbolic, tar, or other medicated soaps for ordinary purposes; the simpler the soap the better."

R. 4.

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the places so as to rinse off all the borax water; place the lace (while damp, and after picking out nicely) between pieces of old black silk or cashmere, and press with a warm iron until dry,—be careful not to use a hot iron.

To Wash Red Table Linen.—Use tepid water with a little powdered borax (borax sets the color). Wash the linen separately and quickly, using very little soap; rinse in tepid water, containing a little boiled starch; hang to dry in the shade; iron when almost dry.

To Cleanse the Woodwork Around Doors.—Take a pailful of hot water; throw in two tablespoonfuls of pulverized borax; use a good, coarse house-cloth—not a brush. When washing places that are extra yellow or stained, soap the cloth, then sprinkle it with the dry powdered borax, and rub the places well, using plenty of rinsing water. By washing the woodwork in this way there is no danger of removing the paint.

To Exterminate Roaches, Ants and Other Vermin.—Sprinkle powdered borax freely about the sinks, on closet shelves, and in cracks about the kitchen where they exist. While destructive to these pests, borax is absolutely harmless to mankind.—Good Housekeeping.

A Monkey Story.

The London Zoological Gardens are the finest in the world. All the animals are well-housed and kindly treated, however, and seem as happy as animals kept in captivity can possibly be.

Not long ago there was a family of very funny monkeys who lived in a corner of the great monkey cage. By the way though this has nothing to do with the story. This cage has a heavy wire netting around it and there are signs put up at the corners warning persons, especially those wearing glasses, not to go too near.

One day the father and mother of this funny family of monkeys were sitting by themselves after dinner. They were quite close to each other, and one might imagine by their frequent nods and winks and by the way in which the father scratched his head slowly and thoughtfully that they were discussing household affairs. It couldn't have been rent or taxes or new shoes for the baby, but it may have been about the proper training necessary for their little son, a cute monkey not bigger than a small kitten.

He has run up the pole and across an upper bar to the centre of the cage, where some larger monkeys were playing. The little monkey wasn't wanted, but as he refused to go away a big monkey pinched his tail. He ran off squealing, scampered over the bar, slid down the pole and went straight to his mother, who put her paw around him and cuddled him just as your mother does when you are hurt. He stayed with her only a minute or two and

then went back to the other monkeys; but he wasn't allowed in the game that time, and being driven away as before he again ran to his mother for a petting.

A third attempt to make friends with the big monkeys resulted in the same treatment. As he slid down the pole for the third time, the father, who had evidently grown tired of the noise, caught him by the shoulders, lifted him off his feet and "put him down hard" upon the perch by his side, as if to say, "You sit there and behave yourself." The little monkey obeyed, stopped his squealing and sat still like a naughty child in a corner.

Couldn't Master Physiology.

A teacher in the high school tells a good story about a colored lad who has passed through the mysteries of the three R's and is now delving into the mysteries of the sciences as taught in our public schools. When the present school year opened this colored lad found himself confronted with physiology. He went at it with all the ardor of an ambitious youth, but as soon as the class had reached the real gist of the study he began to fall hopelessly behind. His teacher expostulated with him, but to no purpose. The teacher was in despair. At last she sent the derelict to Prof. Lewis, thinking that it might do some good. The lad appeared before the Professor and was mildly lectured on what appeared to be his indolence. The lad listened for a time and then said:

"I have done my best to keep up with my class in this, Professor, but I can't do it. When I get to thinking about my insides I just get sick and have to quit."

The colored lad has been excused from further investigation into his inward machinery.—Omaha World-Herald.

"Here's to the maiden of bashful fifteen,
And here's to the widow of forty!"

They have each reached a period in life when most females need assistance in tiding them over the shoals which so often completely wreck their after lives. In producing regularity and healthy action of the female organs, Dr. Pierce's Favorite Prescription stands without a peer. At a time when nature gives them increased burdens, so many young girls have their health for life shattered. If you wish your daughter to miss those periodical, agonizing backaches, and dizzy headaches, languid and tired feelings, accompanied with rough, pimply skin and dull, heavy eyes, get her a bottle of Dr. Pierce's Favorite Prescription. If you have reached the later period of danger and weakness, you will need a bottle, too. See wrapper on bottle for printed guarantee. Satisfaction given in every case or money returned.

Important to Fleshy People.

We have noticed a page article in the Globe on reducing weight at a very small expense. It will pay our readers to send two cent stamp for a copy to Thayer Circulating Library, 36 E. Washington Street, Chicago, Ill.

The Young Folks.

Written for the KANSAS FARMER.

The Wanderer's Prayer.

BY JOSEPHINE RAPLEY-HAGUE.

Dear Jesus hear my broken prayer,
Ascending to thy throne,
That thou wouldst lift the burden
From the dear sad hearts at home.

I've wandered so far from them,
Wandered farther still from thee.
Dear Savior in returning
Will thy sweet smile welcome me?

I repent the sin committed
And the sorrow I have made;
The whilst thou plead for my return
I have the farther strayed.

And Father, that thou dost forgive,
Oh! wilt thou travel on,
And lift the burden I have been
From the dear sad hearts at home.

Thou'st on stormy billow answered
Prayers of loving loyal friends—
That thy sweet forgiving presence
Should my wandering steps attend.

Heavenly Father, wilt thou waft them
Foretaste in thy tender tone,
That thou'lt lift high the burden
From the dear sad hearts at home?

WHO EVER MILKED A MOOSE?

It is quite interesting to hear or read a good story, but often after it is heard or read a vague suspicion enters our minds that it lacks just a little bit of the element of truth. Often a good story is told "only in fun," without the expectation that it will be believed, but after a few repetitions, it passes current as "a true story."

The Lewiston (Me.) Journal indulges in one which bears on its face a very grave doubt. It is so good, however, that with these remarks to warn the credulous, it will be reproduced for "Young Folks." It is entitled in that journal

MILKING A MOOSE.

"Here's a pretty mess. The milk is all gone."

The speaker was one of a party of four New York sportsmen who, with an equal number of guides, had been cruising about on the west branch of the Penobscot, but were now camping on the shores of Chamberlain lake, preparatory to returning to Northeast Carry. They had been out longer than they had planned, and some of the supplies had become exhausted.

Then turning to the guides, who were lying at full length on the ground quietly enjoying the young blood's discomfort, he asks, "isn't there a farm house or hotel near where we could buy some?"

"Depends on what you call near," replied a woodsman. "If you don't reckon forty miles far, then we are near a house, but that's about the distance, may be a trifle more. You want milk powerful bad, don't you? Well, you fill up on water to-night, and may be in the morning I can accommodate you, though mind you, I don't promise!"

"You'll have to get a move on you," said one of the other guides, "if you are going to try to make the Carry 'tween this and to-morrow"—well knowing that the journey in that time was impossible—"for blast me, Annance, if I know where you're going to find the color of milk nearer than that."

Annance made no response, but puffed silently at his favorite pipe. He had an idea, though, that he could get some milk, but did not mean to tell how. That night, unnoticed, he left the camp about sunset, walked slowly through the woods for about a mile, and again came out on the shore of the lake at a point where a small stream formed an outlet. This was near the place where he had seen the cow moose, and here he took up his position beside a trail leading to the water's edge, and along which he could see, if his knowledge of woodcraft did not deceive him, that the moose was in the habit of passing.

In this he was correct, for the guide had not been there more than an hour when he heard the sound of some animal approaching, and peering cautiously through the bushes he saw a cow moose making for the pool. The animal sniffed the air a few times as she passed within a dozen paces of the hunter, but otherwise did not show signs of alarm. She was soon in the water ridding herself of the flies and quenching her thirst.

While the moose was disporting herself Annance left his position behind the bush and walked a few steps toward her, and whenever she turned he would stand perfectly motionless.

By repeating this operation several times

he managed to reach the edge of the lake without alarming the moose. As soon as the animal showed any signs of leaving the water the guide retreated a few steps. Once or twice did the moose raise her head and look at him, only, however, to resume her clumsy frolics.

Presently the moose made toward the shore, and Annance concealed himself behind the bush again. At the edge of the lake the animal turned to take a last look and shake the spray from her nose. Then she advanced slower up the sloping bank. When opposite the guide she sniffed something, stopped, and looked around.

That was the guide's chance, and he knew it. The critical moment had arrived, and with one quick but silent movement he was by the animal's side. She did not move except to turn her head and look at him. Annance kept near her hindquarters, well knowing that if he got in front of the moose he would not stand much chance should she become ugly. Cautiously bending forward, the hunter stroked her sides and allowed her to turn and smell of him. After a few seconds, seeing the moose did not appear frightened, Annance, with little more difficulty than is experienced with many domestic animals, proceeded to fill a small pail he had brought along with rich, yellow milk. Returning to camp, he produced the milk when breakfast was ready in the morning, having kept the pail in the water over night, much to the astonishment of the guides and sportsmen.

People who visit Moosehead often hear Charles Annance spoken of as the "dairyman," and the foregoing story is what gives him the nickname.

Say, boys, did you ever indulge in the gentle operation of milking a heifer for the first time? If you have, you can form a pretty correct estimate of how much of a chance the most expert milker would have in his endeavors to milk a moose.

Billy.

The clerk at the general delivery window in a city postoffice is usually a pretty busy individual, but on rare occasions he has his moments of leisure. It was such a time, one summer afternoon, when active business seemed entirely suspended, that the young man who presided over the general delivery was startled out of a comfortable nap by the sound of a piping voice issuing from an invisible quarter:

"Say, mister," said the voice, "is der a letter fer me?"

The clerk stared out across his little corner, but failed to see the owner of the voice. Then he poked his head half way out of the narrow window, and glancing down saw a little mite of a ragged fellow with a bootblack's kit swung around his shoulders.

"A letter for you?" he echoed with a smile. "I don't know. What's your name?"

"Billy."

"Billy—what else?"

The little fellow shifted from one foot to the other, but his clear blue eyes looked steadily at the clerk.

"Notin' else," he said, "jes' Billy."

"I guess not," the clerk replied. "Were you expecting a letter?"

"Yes, sir."

There was an expression of faith in his errand in the little fellow's face, and the clerk racked his brain for a simple explanation to offer him.

"Mebbe," said the boy, "if I told yer why I wuz-a-lookin' fer a letter, yo' ou'd find it fer me."

"Perhaps I could," said the clerk. "It won't do any harm to try, anyway."

The little fellow set his bootblack's kit down on the floor.

"It wuz like dis," he said. "Las' Sunday mornin' I wuz at d' mission Sunday school up town, an' on my way back I walked wid Miss Rogers. You know her?"

"No," replied the clerk, still smiling.

"Yo' orter. She's d' teacher uv our class. She wuz-a-tellin' me erbout d' lesson, an' when I left her by her house I jes' knowed it all. Well, I walked on down d' street, an' pretty soon I seen an' old gent in front of me drop a pocketbook, when I picked it up an' tuk it over t' the alley where I live. I seen it wuz full of money, but I never touched none uv it. Long erbout night time I begun t' think o' the Sunday school lesson, an' the more I thought uv it the more I got worried. D' nex' mornin' I put on my good clothes agin, an'

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I waz a-goin' t' take d' pocketbook up t' Miss Rogers. I knowed she'd feel bad's I did, an' so I thought I'd send the money back on my own accord. D' wuz some cards 'n' things in it, tellin' d' name o' d' man what dropped it, an' I writ a letter to him, 'splainin' how I wuz sorry I'd kept it, an' signed my name—jes' Billy. Den I wrapped it up, an' sent it to him by mail."

The clerk had ceased smiling by this time, and he looked into the boy's sober face, as he asked:

"Did you tell the man where to reply to your letter?"

"Nusser; but I said I'd come here an' ask, to see ef d' pocketbook got to him, dat's all."

"I see," replied the clerk. "If you'll wait a minute, I'll see if I can find anything."

Without any hope of success, he went over to the "B" box, and ran quickly over the letters it contained. In the center of the pack he found one addressed:

BILLY.

To be called for.

With a bright face he hurried back to the window, and handed the missive to the little bootblack.

"Here it is," he said. "This must be for you."

Billy took the letter, turned it over once or twice, and then handed it back.

"Read it fer me," he said, "I ain't much on makin' out writin'."

The clerk opened the envelope and extracted the contents. In a business hand was written a kindly letter to "My honest little Billy," and the writer asked that the boy call and see him at an address which he gave. The letter closed with the familiar words that "honesty was the best policy always, but I feel that in this case a reward of another sort is called for." The latter referred to a neatly folded greenback which was enclosed.

The clerk read the letter over to Billy, and then handed it to him with the inclosure.

"Go up to Miss Rogers," he said, "and tell her the whole story; she will advise you what to do."

Little Billy's eyes sparkled as he thanked the clerk. Then he swung his kit over his shoulder again, and, promising to return to explain the rest of the adventure, he trudged out in the street.

It was a week later when he came back to see the clerk. His clothes were new and fitted him somewhat better than his old ones, and the bootblack kit was not visible. He reached up and shook hands with his friend as he said:

"I ain't shinin' shoes no more. De gentleman dat writ me dat letter hez give me a

place in his office, an' I'm a-goin' to night school now."

He said more than this, and the two had a chat during the first lull in business. But we have told enough of little Billy's story to show how true—always true—is that story about honesty is the best policy. And even if there had been no letter for Billy the policy would have been the same.—Baltimore Methodist.

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Shawnee County Farmers' Institute will be held at Oak Grange hall, Mission township, on Thursday and Friday, February 2 and 3. The first session will be held on Thursday evening. A basket dinner will be a pleasant feature of Friday's session.

Judge Wellhouse, who is sometimes called the "Apple King," owing to the fact that he is the largest apple-grower in the United States, says that the horticulturists of Kansas are unanimously opposed to consolidation of the horticultural interests with the Agricultural department.

The **KANSAS FARMER** presents this week the introductory paper of a series on "Insects on the Farm," by Prof. Kellogg, of the State University. These, as the reader will need no telling after reading the first, will be so interesting and instructive, so plain and easily understood that they will be sought eagerly by every reader. "Knowledge is power," and the knowledge of how to deal successfully with our insect foes—sometimes by the aid of our insect friends—is just now receiving such development as to make it a power for the good of the farmer.

The State Agricultural college has determined upon a course of lectures, beginning February 14th and continuing until the 25th. The plan is for three or four lectures per day, most of them to be given by members of the faculty; but it is expected that some half dozen prominent men from outside will assist. It is expected that an hour and a half will be given to each lecture and its discussion. This will constitute a valuable short course, or farmers' extended institute, and will be well worth the time and expense of attendance to as many farmers as can be gathered at Manhattan.

The situation in the Kansas Legislature has not changed materially since last week. The rival organizations of the lower branch continue to occupy the same hall without friction. No election of State Printer has been effected. The Republican caucus named J. W. Ady, of Newton, as its candidate for United States Senator, and the votes of the Republicans were cast for him. The Populist caucus failed to agree upon a candidate, but the vote in the two houses resulted: J. W. Breidenenthal 25, Frank Doster 24, John Martin 15, M. W. Coburn 11, with the others scattering. It is by many predicted that the election of two Senators will be claimed, one by each of the two great parties of Kansas. It is strongly intimated that the Republicans will unite with their ancient enemy and send a Democrat to the Senate to defeat the seating of a Populist. All legislation is at a standstill.

ANTI-OPTION.

The subject of restricting gambling in farm products came before the Kansas Legislature last week and received an emphatic endorsement from every branch of that body which considered it. The **KANSAS FARMER** had prepared three copies of a concurrent resolution on the subject, and arranged to have it introduced in the Senate and in each of the lower houses. The matter was first taken up in the Senate, where the resolution was introduced by Senator Landis, an extensive wheat-grower of Barber county. The resolution was warmly espoused by both Populist and Republican Senators, and was adopted unanimously. On the following day the resolution was introduced in the Populist House by Mr. Kenton, who is extensively engaged in farming in Rice county. It was here passed unanimously.

The resolution was as follows:

CONCURRENT RESOLUTION.

WHEREAS, There has, during recent years, grown up among the boards of trade and exchanges, a system of trading known as "options" and "futures" that enables non-owners to offer for sale quantities of wheat, cotton, and other products of the soil greatly in excess of the quantities grown and available for delivery; and WHEREAS, The exchanges provide no means for discovering, but on the contrary, resort to all manner of devices to prevent disclosure of the quantities offered and what part thereof is in excess of the quantity produced and actually available for delivery; and

WHEREAS, The offerings of agricultural products in quantities greatly in excess of the quantity produced and available for delivery, has much the same effect as would an over-production of the article so offered; determines the price the farmer shall receive for his products; reduces the returns received from the capital and labor employed in agriculture; diminishes the value of land and its products; impoverishes the cultivator, thereby destroying his power to purchase of the products of others; creates commercial stagnation; causes rapid and wide fluctuations and great declines in price; intimidates and drives from the market the investment buyer; restricts and narrows the market by causing miller and spinner to buy only for instant consumption; tends to destroy owner's interest in the value of actual property protected by a hedged sale and usurping the functions of supply and demand enables the "option dealer" to determine values by manipulation; and

WHEREAS, Such fictitious transactions upon the exchanges, that determine the value of actual products have become so numerous as to greatly reduce the profits of agriculture; and

WHEREAS, It is manifest that wrongs are thus inflicted upon 40 per cent. of the population engaged in agriculture, hence relief can come only through Congressional action; now therefore, be it

Resolved, By the Senate, the House of Representatives concurring therein, that the Senators and Representatives in Congress assembled be and are hereby requested to enact the bill now pending in the Senate, being House bill No. 7845, and known as the "Hatch bill," or to at once enact some other law whereby the offering and sale of farm products upon the exchanges shall be restricted to the owners thereof and those who have acquired from the owner the right to the future possession of the articles offered, in order that the value of the products of the soil shall not be beaten down and the prosperity of the cultivator destroyed by the offering of unlimited quantities of simulated or phantom products by those owning little or none of the articles offered.

THE GOOD ROADS MOVEMENT.

Complaint is made by those who are engineering the movement for better country roads in the United States, that a good deal of apathy exists, and that petitions sent out for signatures are not returned as promptly as was expected. The indifference doubtless is to some extent attributable to the impression in the public mind that there are selfish purposes behind the movement, and that somebody is waiting to step into the comfortable official position as soon as it is created. The petition asks that there be founded in the city of Washington a Road Department, similar to the Agricultural Department, for the purpose of promoting knowledge in the art of constructing and maintaining roads, and that in such department provision be made for teaching students, so that they may become skillful road engineers. It is suggested also that in connection with this Road Department there be established a permanent exhibit, in which shall be shown sections of roads, illustrating the various methods of construction, and also the best road materials and machinery. The petition further requests that Congress appropriate sufficient funds to erect a building at the World's Columbian Exposition for

the purpose of a comprehensive road exhibit. Now, it is argued that all this is for the special benefit of country communities—of agriculture—and yet it is urged that it be placed in the hands of an independent department. There is no reason apparent why this work in its entirety, or in so far as it should be taken up, if any part should be omitted, may not be done in a bureau of the present Agricultural Department, without the cumbersome machinery and expense of an independent road department. Improved highways are a part of the advancement of the age, and better means of travel and transportation are sure to come with the more perfect development of the country; so, too, offices will be increased, and it is exceedingly popular to assist in the promotion of schemes providing means to get people on the public pay-rolls. But at the risk of being considered old-fogyish, the **KANSAS FARMER** prefers to assist in placing in the hands of departments at present organized and prepared for it the work which naturally and properly belongs to them, rather than to aid in creating new expenses without corresponding additional benefits. Let the whole subject of Road Department be referred to the Department of Agriculture.

DAIRY SCHOOLS IN IOWA.

Kansas is just now seriously considering the subject of a dairy school in connection with the work of the Agricultural college, at Manhattan. The experience of Iowa in this matter is clearly set forth in the following from a letter by Prof. James Wilson, of the Iowa college, to the **KANSAS FARMER**:

"Although it is only a little over a year since the dairy building at the Iowa Agricultural college, Ames, Ia., was completed and opened for the admission of students, the dairy education given here has become so popular that we are getting about as many students as we can handle to the best advantage with our present facilities. One of the problems that came up for solution during the past summer was how we could do the most good and be of the greatest benefit to those students who came before and after the regular dairy school that begins the 1st of December and continues for twelve weeks. As we have in operation a butter and cheese factory the year round, and consequently handle a large amount of milk during the summer months, we received applications for admission from a number of young men who could attend the school most conveniently during the summer months. We have admitted such and given them thorough work on the practical side, allowing them to work continually with those who have charge of the commercial side of the factory, but for want of educational force have been unable to give them more than thorough drilling in all that pertains to practical dairy work. Now, however, the Board of Trustees having provided for educational work by the election of a dairy specialist, we will be able to be of as much benefit to the summer student as the one who comes in the winter, and have decided to conduct three dairy schools in the year instead of but one. The first of these schools will begin March 1, the second August 1, and the third December 1, as heretofore. Students attending the summer school will be given thorough drill in the practical dairy work, both with cheese and butter, and Prof. Wallace will deliver to them a special course of lectures, dealing with every phase of the dairy question, from the cow to the churn and curing-room. In addition to this the students who enter at the beginning of the term will have the opportunity to attend the classes of the regular four-year course and take the lectures on breeding, feeding, breeds of live stock, etc., or any others that they may elect, thus giving them an opportunity to devote the major part of their time to dairy work and at the same time obtain a much broader education than usual. Especial attention will be given to farm dairying during these summer schools, thus giving the younger boys and the girls a chance to get a thorough knowledge of dairying that they can take home and apply. No entrance examinations will be required of those who

enter either of these dairy schools, and we hope to see them fill up rapidly with bright young men and women from the farms of the West."

COURSE OF LECTURES TO FARMERS.

The *Industrialist*, the organ of the State Agricultural college, invites attention to a short course of lectures on practical topics pertaining to agriculture, horticulture, stock-raising, dairying, veterinary science, road-building, farm architecture, farm accounts, etc., which will be given free to all parties interested. The course will commence on Tuesday, February 14, at 10 o'clock a. m., and continue daily, including Saturday forenoon, February 18, until Saturday noon, February 25. It is intended to give three lectures per day; at 10:30 a. m., at 1:30 p. m., and at 3 p. m. Occasionally there will be an evening lecture. Each lecture will be followed by a general discussion of the presented facts, in which all are expected to participate. A program, giving the necessary details, will be issued before the opening of the course. The following is a list of the subjects to be presented by members of the faculty:

1. History and Description of Prominent Breeds of Cattle, by Prof. Georgeson.
2. Horses, Sheep and Swine, with Special Reference to their Adaptation to Kansas, Prof. Georgeson.
3. Stock-Breeding—Laws of Heredity, Prof. Georgeson.
4. Agricultural Experimentation, Prof. Georgeson.
5. Principles of Propagation in Horticulture, Prof. Mason.
6. Small Fruit Culture, Prof. Mason.
7. Grape Culture, Prof. Mason.
8. Special Insect Pests of the Orchard, Prof. Popenoe.
9. Special Insect Pests of the Garden, Prof. Popenoe.
10. Use of Insecticides, with Methods, Prof. Popenoe.
11. Useful and Noxious Birds, Prof. Lantz.
12. Cross-fertilization of Plants, Prof. Hitchcock.
13. Common Agricultural Fungous Pests, and their Treatment, Prof. Hitchcock.
14. Dissemination of Plants, Prof. Hitchcock.
15. Feeding and Feeding Stuffs, Prof. Fairley.
16. Milk, Butter and Cheese, Prof. Willard.
17. Soils and their Improvement, Prof. Fairley.
18. Plants in their Relation to the Air and the Soil, Prof. Fairley.
19. Care of Sick and Wounded Stock, Dr. Mayo.
20. Veterinary Surgery, Dr. Mayo.
21. Judging Horses, Dr. Mayo.
22. Country Roads, Prof. Lantz.
23. Farm Buildings, Prof. Walters.
24. Home Grounds, Prof. Walters.
25. Preservation of Foods, Mrs. Kedzie.
26. Division of Labor on the Farm, President Fairchild.
27. Elementary Principles of Farm Mechanics, Prof. Hood.
28. Electrical Frauds, Prof. Nichols.
29. Economic Production and Use of Energy on the Farm, Prof. Hood.
30. Taxation, Prof. White.
31. Farm Accounts, Secretary Graham.
32. The Farmer as a Producer of Wealth, President Fairchild.

Lectures on special topics, by practical farmers and specialists, will probably be presented, as follows:

- Mixed Husbandry, Hon. Joshua Wheeler, Nortonville.
- The Apple Orchard, Judge F. Wellhouse, Fairmount.
- The Cattle Industry, Hon. T. M. Potter, Peabody.
- Sheep Industry, Mr. H. A. Heath, of the **KANSAS FARMER**.
- The Dairy, Hon. Geo. Morgan, Clay Center.
- Swine Husbandry, Hon. F. D. Coburn, Kansas City.
- The Balanced Ration, Mr. P. S. Creager, of the *Kansas Capital*.

The invitation to attend this course of lectures is extended to all—old and young. It is expected that the progressive farmers of Kansas will promptly and heartily respond. Such an opportunity to study modern ideas of farming, and to become acquainted with the means and methods of the largest agricultural school in America, should not be neglected. The library and reading rooms of the college, and its museums, laboratories, green-houses, barns and class-rooms will be open every day, and everything will be done by the faculty to make the course profitable and interesting to all who attend. There will be no charges, the only expenses being for board and lodging, and these can easily be kept within \$1 a day, if so desired.

In order to perfect the necessary arrangements, including the preparation of a list of suitable boarding places, all who propose to attend are requested to send name and address not later than February 10 to the President of the college, at Manhattan.

*Prof. Georgeson, having been unexpectedly commissioned by the United States Department of Agriculture to study the dairy industry in Denmark, England and Holland, these lectures give place to others this year.

Don't expect good results from wrong conditions.

I find Salvation Oil the best cure for rheumatism I have ever known. Joshua Zimmerman, Wetheredville, Md.

SECRETARY OF AGRICULTURE.

At the recent meeting of the Kansas State Board of Agriculture, resolutions were adopted, by a rising vote, recommending Hon. George W. Glick for appointment to the Cabinet position of Secretary of Agriculture.

Governor Glick responded as follows:

MR. CHAIRMAN AND GENTLEMEN:—I certainly feel profoundly grateful for this manifestation of your kindness. While there is no probability, and hardly any possibility, that the selection that you have so kindly suggested will be made, it is nevertheless but just that I should say to you that the adoption of your resolution conveys to me pleasure as lively as though it could be realized and I were given the position. I know of no vote that any man could receive that pays a higher compliment. and, in my case, I might say, Mr. Chairman, an undeserved compliment, because it says pleasing things and kind things, perhaps way beyond my deserts. Outside of the resolution, I might say to the gentlemen met here, that we were the first to move in the direction of having the office or Commissioner of Agriculture made a Cabinet position. Kansas stood in the first rank. Not only this State Board of Agriculture but repeatedly, twelve, fifteen, and I don't know but twenty years ago, the Legislature of the State of Kansas passed resolutions suggesting the change and maintaining that a Cabinet office should be created to take the place of the office of Commissioner of Agriculture. We felt then, and I know, for I prepared resolutions upon the subject myself, and they were introduced and were passed through both houses of the Legislature unanimously, that the farming interest of this country was and is the great industry of the country. That it was the great motive power that kept the prosperity of the people moving forward, and when we consider the great South and the great West, and especially the great West, that contains the grain-producing part of this nation, and the beef-producing part of this nation, and the pork-producing part of this nation, and the wheat and corn-producing part of this nation, which furnished over eight hundred millions of the exports of our great nation, it deserves some recognition at the hands of any administration that the people may call to power. Add to that, the products of the South, whose interests, so far as agriculture are concerned, are identical with our own, although in a different direction, and it swells the great agricultural exports of this country to eight hundred and twenty millions per annum, leaving only one hundred and eighty millions of exports of all other articles of our great nation. We are paying our debts to the other nations of the world by the sweat of our faces, by the products of our agriculture. We are keeping our gold at home. We are keeping the balances of trade in our favor, so that when the balances are settled, they are paid to our nation in gold. In all times of misfortune, in all troublous times, where the government is compelled to rely upon any class of its citizens, she can always rely, and she has always relied upon that great stratum, the agriculturists of the country. They are conservative: they are thinking men. Their avocation and business in life takes them outside of the turmoil and strife of the great centers of population and commercial and political activity. While following their plows, while feeding their stock, they are engaged in solving within their own homes the great problems of our nation, and the best methods of conserving and extending its great prosperity. If it be said that this is a selfish consideration, the answer is, Mr. Chairman, that the cherishing and protection of selfish interests is what constitutes the great conservative power of the American nation. We have to rely upon that. If there were no personal interest behind us; if there were no personal interest to urge us in the direction of certain measures, in the direction of certain lines, in the advocacy and solution of certain great political and economical problems, we would be simply a disorganized mob, controlled by the passions and excitements of the hour. This nation has got to rely upon our agricultural population for its greatness. It relies upon it to pay our debts, and in times of trouble, when the call is made, it is the agriculturists who desert the plow and shoulder the musket, and declare that their country is right and that its rights shall be maintained whether it is right or not. No country like ours, whose substratum of business is its agriculture, can exist unless that great population of the country is properly looked after and properly cared for, and its greatness and its power and its necessities properly considered. Now, gentlemen, I do not desire to take up your time. I feel that I am trespassing now, but there is another word I want to say. The office of Secretary of Agriculture is a very important office to the people of this country, important because we are the representatives of the great wealth of this nation, we are the representatives of the producing wealth of this nation; we represent that business upon which the prosperity of this nation is founded, and without which it cannot be maintained, and

therefore, we are entitled to have an officer in the Cabinet of the President of this nation to represent us, to be our attorney, to be our spokesman, one who understands our needs, and will stand up for our rights. There are other considerations in this matter, fellow citizens, that would be personal, confined to this locality, important way beyond what any of us perhaps appreciate until we think about the matter. I need only call your attention to the fact that through the efforts of the Secretary of Agriculture, millions and millions of dollars worth of produce of this country are sold to foreign nations from the city of Chicago, and when you reflect that by a little management, developing the Mexican and other markets, you could increase the business of the Kansas City packing houses and other industries in this State, ten, fifteen or twenty millions a year, you will readily perceive the exact benefit we shall personally derive in this locality. Business need not be transferred from Chicago; it need not be transferred from Milwaukee, and without interfering with these great markets business interests may be established in the center of this great agricultural country that would redound to the benefit of each and every one of us. It would increase the value of our farms; it would increase the value of the produce of our farms; it would increase the value of our herds and of our flocks, and in that way inure directly to the benefit of every man who lives in this great Missouri valley, or in the great Mississippi valley, as we like to express it, because we like to spread over as much territory as we possibly can. While we are upon this subject, Mr. Chairman, I might say just a word further: If we will exercise the proper amount of agility, we can do millions of dollars of business with the Republic of Mexico that we do not do to-day. Why, the fact is, gentlemen, that American hams are selling to-day in the city of Mexico for 75 cents a pound. Why should not trade relations be established with that country so that 57 or 80 or 90 per cent. of the products of your packing houses might be consumed by those people, and put into your pockets many hard dollars? That would benefit you all; it would be a matter of vast benefit to you all; it would increase the wealth of all of you; increase your prosperity, and contribute greatly to that happiness that I hope, in the good will of Providence, we shall have, whether Mr. Glick is Secretary of Agriculture or not.

STOCKS SHRINKING.

The fact that the "agricultural depression" is not the only "dullness" is well illustrated by the following quotations for leading railroad stocks at the beginning and the close of 1892:

| | Opening. | Closing. |
|------------------------------------|----------|----------|
| Canada Southern..... | 61 1/4 | 56 1/2 |
| Erie..... | 34 1/4 | 24 |
| Lake Shore..... | 123 1/4 | 127 1/2 |
| New York Central..... | 116 1/4 | 109 1/4 |
| Pennsylvania..... | 57 1/2 | 54 1/2 |
| Atchafalpa, Topeka & Santa Fe..... | 45 1/4 | 33 1/4 |
| Chicago, Burlington & Quincy..... | 109 1/4 | 97 1/4 |
| St. Paul..... | 82 1/2 | 77 1/2 |
| Chicago & Northwestern..... | 116 1/4 | 111 1/2 |
| Rock Island..... | 89 1/4 | 82 1/2 |
| Missouri Pacific..... | 63 1/4 | 56 1/4 |
| Illinois Central..... | 109 1/4 | 99 1/4 |
| Canadian Pacific..... | 92 1/4 | 89 1/4 |
| Central Pacific..... | 34 1/4 | 27 1/2 |
| Northern Pacific Pfd..... | 72 1/4 | 47 1/2 |
| Southern Pacific..... | 30 1/4 | 33 1/2 |
| Union Pacific..... | 48 1/4 | 39 1/2 |
| Chesapeake & Ohio..... | 26 1/4 | 23 1/2 |
| Louisville & Nashville..... | 84 1/4 | 71 1/2 |
| Norfolk & Western Pfd..... | 55 1/4 | 38 |
| Texas Pacific..... | 13 1/4 | 9 1/4 |

It thus appears that in spite of the immense crops which have burdened the roads with more freight than they could properly handle, and notwithstanding the prospects that the World's Fair will tax to the fullest extent their capacity to carry passengers, some cause has operated to depress the average price of the leading stocks an average of nine points.

At a meeting of the Shawnee County Dairymen's Association, held last Saturday, at Lincoln Post hall, the subject for consideration was legislation to prevent deception in the sale of oleomargarine and other substitutes for butter. The expression of the speakers was that they were not afraid of competition with any of these products when sold for what they are; but that when the purchaser is tricked into the belief that he is securing pure dairy or creamery butter, these articles secure an advantage in the market which does not belong to them and at the expense of the producers of genuine butter. The bills prepared by the committee of the State Dairy Association were before the meeting and elicited considerable comment. It was thought that these bills, which embody the provisions of the Iowa law, would be beneficial, if enacted, but it was held that more radical measures should be secured if possible. A committee was therefore

appointed to prepare a bill in accordance with the views of this association.

Shawnee County Horticultural Society.

The first meeting of the new year was held in G. A. R. hall, January 21.

The election of officers resulted as follows: President, J. F. Cecil; Vice President, J. M. Priddy; Secretary, W. T. Jackson; Treasurer, Philip Lux.

The retiring President, A. H. Buckman, complimented the society on the work completed and benefit derived from experience during the past year, and predicted that much would be accomplished in the year just commencing, by all horticulturists who give time and thought to the business, urging the necessity of attendance at all meetings, for the interchange of ideas and experience on subjects possessing mutual interest.

Mr. Creager, of the Capital, called the attention of the meeting to the fact that it was desirable that the State Horticultural Society hold its meetings hereafter in Topeka, and suggested that a chrysanthemum show be the prominent attraction, though fruits be also exhibited. It was decided to make this a subject for the next meeting, and a committee, consisting of President J. F. Cecil, Judge Wellhouse and Philip Lux, was appointed to formulate a plan to be presented for the approval of the society.

To prevent further mistakes it was decided by resolution that future meetings be held on the fourth Saturday of each month at 1:30 p. m., in the parlor of G. A. R. hall, Topeka.

Missouri Valley Horticulturists.

EDITOR KANSAS FARMER:—The Missouri Valley Horticultural Society met January 21, 1893, in the office of Blair & Kauffman, Kansas City, with the President, J. C. Evans, in the chair.

In response to a call from the members, the President-elect for 1893, J. C. Evans, made a few inaugural remarks, outlining the work he hoped to accomplish as manager of the World's Fair exhibit for Missouri.

The first work presented was the report from the Executive committee for 1893.

The following program was adopted and ordered printed:

March—"Proper Care of an Orchard," H. Hughes; "Horticultural Library," L. A. Goodman.

April—"Treatment of Evergreen Varieties," J. O. Durkees; "Humbugs," John Blair.

May—"Horticulture and Health," Mrs. Chandler; "The Treatment of Roses to Obtain Bloom," Mrs. Grace Durkees; "Small Fruit," George W. Hopkins.

June—"Horticulture at the World's Fair," J. C. Evans; "Fruit-Growing in Southern Missouri," M. G. Gona; "History of the Apple," Dan Carpenter and Amanda Evans.

July—"What New Fruits," L. A. Goodman; "Birds at the World's Fair," E. T. Keim; "Canning for Home Use," Mrs. Edwin Taylor; "Flowers," Mrs. G. E. Rose.

August—"Tree Types," G. E. Rose; "The Beautiful in Horticulture," Lizzie Espenlaub; "From Blossom to Fruit," Edwin Taylor; "Bugs," F. Holsinger.

September—"Farm vs. City," H. A. White; "Failure of Fruit in 1892 and the Effect on the Trees," J. Durkees; "Apiary, Its Relation to Horticulture," Paul Evans; "Chrysanthemum," Annie Espenlaub; "Vineyards," G. F. Espenlaub.

October—"Horticultural Displays," A. Chandler; "Spraying," A. H. Gilkerson; "Chemical Composition of Soils," J. A. Thompson; "Botany," M. Louisa Goodman; "Ornithology," E. T. Kiem.

November—"Storage of Fruit," L. A. Goodman; "Good Roads vs. Poor," Edwin Taylor; "Energy a Factor of Success," M. L. Thompson.

December—Reports for the year and election of officers.

Passing to the discussion of the fruit prospects for the ensuing year, Mr. W. A. Gosnell, of Kansas City, Missouri, reported peaches all right yet, and apple orchards apparently recovered from last year's blight. He thought that the Winesap trees had suffered most, the leaves often withering up as

if scalded. Yet they made some new growth.

Mr. Espenlaub, of Rosedale, reported his trees not yet recovered. The summer varieties suffered least.

J. A. Balies, of Lee Summit, reported his trees not yet recovered. He thought the blight the result of electricity.

Several orchards were reported to have suffered none whatever, and to have borne a heavy crop.

Mr. Miller, of New York State, reported that the fruit trees in his section had suffered in the same way the previous year. He stated that others attributed the blight to electricity, but he believed it to be the result of continuous heavy rains. Too much wet at the time of blooming will often cause the leaves to curl and the fruit to drop.

H. Hughes, of Rosedale, reported his peach orchard slightly injured by the late cold, but, as a rule, few orchards have suffered yet.

Grape vines were reported by G. F. Espenlaub to be in the very best condition. He thought that strawberries did not promise a full crop.

After some further discussion the society adjourned to meet in the office of Blair & Kauffman on February 18, 1893. GEO. E. ROSE, Secretary.

Some Practical Experience.

EDITOR KANSAS FARMER:—It will probably be of interest to some of the readers to know that most all of their stock, including horses, cows and hogs, will eat and relish a few sweet potatoes. We fed a wagon load this fall. As we were not prepared to keep them we tried it as an experiment, for we knew they would rot and be a loss. But we were successful.

In southern Kansas, along the streams where it is sandy, we can grow from 200 to 400 bushels per acre, and much cheaper than corn. We cannot see why it would not pay to raise an acre, for there is nothing that a hog likes any better; and our horses would leave their corn meal, wheat bran, dry or soaked corn, as soon as we would give them a potato.

To protect trees from rabbits and mice rub the trees with rabbit blood, or, when you are going to and from town, pick up the old tin cans you see along the road, take them home, unsolder the bottom and sides, and set them around your young fruit trees to keep rabbits and mice from bothering them.

Where you have many tree holes to dig, lay off your rows with a plow and try a common road-scraper. It is much faster and easier than to do all the digging with a spade.

Argonia, Kas. HOBBS BROS.

B. F. Gehman, of Hutchinson, writes: "I would like to hear some of your correspondents discuss the pros and cons on breaking prairie in March or April deep enough so as to be able to harrow fine and plant corn on and cultivate it as any corn planted with a planter. Also, is there such a thing as drilling along with corn some compound that would keep moles from taking the corn? Another question is, would it pay to use any of the patent fertilizers when planting corn in sandy soil?"

One of the best and most timely agricultural books published last year was "Clover Culture," by Henry Wallace, editor of the Iowa *Homestead*. It is bound in cloth and sells readily for one dollar. Every farmer in this State should have a copy at once, and the Kansas Farmer Company, always on the alert to give its readers unusual benefits, will present a free copy of "Clover Culture" to any reader who will send us but three yearly subscribers and one dollar each, or we will supply the book and one new subscriber for only \$1.50. Order now of this office.

In the past few years Hood's Sarsaparilla calendar has become such a favorite that the people anticipate its annual appearance with pleasure. The calendar for 1893, which is now before us, will fully satisfy every expectation as to beauty and utility. It is a little larger than ever before, and bears a beautiful picture of the "Young Discoverers" with a pad below in plain figures, all printed in pleasing and harmonious colors. To be appreciated it must be seen. Get a copy of your druggist or send 6 cents in stamps to C. I. Hood & Co., Lowell, Mass.

Horticulture.

INSECTS ON THE FARM.

By Prof. V. S. Kellogg, of the State University.

If the editor of the KANSAS FARMER is going to devote space in his paper to the "insects on the farm," and that is his avowed intention, it is certainly not unfair for the subscribers to his paper to ask him why he should do our little insect cousins this special honor? Fortunately, in these good days of reading and general intelligence, there will be few of the FARMER'S readers who will not be quick to answer their own question.

The insect on the farm as an accessory or subsidiary crop is unfortunately of only too much importance in the sum total of Kansas farm produce, and while Mr. Mohler does not devote any columns of figures in his crop statistics to the number of bushels of chinch bugs and Hessian flies and wheat straw worms annually produced in Kansas fields, yet the fact that there are bushels and bushels of them is very evident to Kansas farmers and is indirectly shown in these very statistics.

The time has gone by when it is necessary to emphasize the importance of economic entomological work, by presenting statistics of the annual losses sustained by various crops by reason of insect attack. It was good old Horace Greeley who said in his essay on "What I Know About Farming:" "If I were to estimate the average loss per annum to the farmers of this country from insects at \$100,000,000, I should doubtless be far below the mark. The loss of fruit alone by the devastations of insects, within a radius of fifty miles of this city must amount in value to millions. * * * We must fight our paltry adversaries more efficiently, or allow them to drive us wholly from the field."

Since the time of Greeley the fighting has gone on bravely, and in very recent years especially has been in certain instances gratifyingly effective. In California certain small scale insects have annually caused great loss to fruit-growers. A "lady bug" which feeds on these scale insects has been introduced into California from Australia through the efforts of the Bureau of Entomology of the United States Department of Agriculture, and has become the means of a large annual saving. In Massachusetts an European moth, known as the Gypsy moth, whose larva (the caterpillar) is very destructive to the foliage of fruit and forest trees, had gotten a good foothold in a certain forest area. By prompt and energetic measures this pest, which threatened to spread over all of New England, ravaging the forests of that region, has been confined to a limited area, the infested region being not over fifty miles square. Finally, Prof. Snow's war on the chinch bug stands out conspicuously as a great work in economic entomology. Prof. S. A. Forbes, State Entomologist of Illinois, and one of the foremost of present day economic entomologists, says of this work in a recent address on the entomological work of the year 1892:

"I must not leave this subject without more special reference to the remarkably extensive, suggestive and thoroughly conscientious work of Prof. Snow on the propagation and dissemination of the diseases of the chinch bug, set forth with considerable detail in his report already referred to. Excepting the war on the Gypsy moth in Massachusetts, it is the largest practical undertaking of the year in economic entomology."

The one prime object in view in the study of economic entomology is the getting at remedies—cures for the diseases to which our crops are heir, by reason of their insect enemies. Now, while it may be very simply stated that the good and sufficient remedy against the ravages of the corn-root worm is a rotation of crops, and the economic entomologist may perhaps properly consider his duty done when, after discovering this fact by arduous study, he announces it to the corn-grower. Yet I am inclined to the belief that the entomologist may and should go a step farther. This step is at once in the

line of general education, and in the line of making his rotation-of-crops-injunction more likely to be acted on. This further step is the explaining, in simple but exact language, the reason why a rotation of crops is an effective remedy in the case in point. Such an explanation must involve more or less discussion of certain points in the economy of insect life, and this discussion is likely to be involved in considerable mystery unless the reader possesses an elementary knowledge at least of the life history and general make-up of insects, or unless this elementary information is given every time a remedy is proposed. This last alternative is quite impracticable. Therefore, the point is to bring about the first condition, namely: a knowledge on the part of the readers of the elements of insect economy. This is not at all a difficult matter to face; in fact, it seems to me a very simple and easy one. And now, in the winter time, before we have to get actively to work applying our remedies, is the time for getting the elementary knowledge. So the FARMER proposes to organize into one large class those of its readers who care to learn something about insects, and to print for them, this winter, a series of short connected articles, properly illustrated, on "Elementary Entomology." It is hoped that some, if not all, of the graduates of this class may become sturdy insect fighters, and so really do something in the way of "standing up for Kansas" as well as for themselves.

Whole-Root vs. Piece-Root Grafting.

LAWRENCE, KAN., January 17, 1893.

EDITOR KANSAS FARMER:—The following is a substantial copy of the report of a committee appointed at the recent annual meeting of the Kansas State Horticultural Society to examine specimens of apple trees grown and exhibited by Wm. Cutter, of Junction City:

Your committee, to whom was referred the exhibit of apple trees made by Wm. Cutter, of Junction City, Kas., with his article explaining method of propagation, beg leave to say, that we have carefully examined the same and find, that those grown from whole-root grafts are well rooted and have made a fair wood-growth, but no better than those grown from sections of roots.

Your committee regard the whole-root process of propagation, at least of the apple, objectionable, because the roots supporting the tree wholly develop from the seedling root used, and which are known to be unreliable in hardness, and the length of the "whole-root graft" is a difficult form to plant, while with the "section-root grafts" the system of roots develop largely from the cion used, and if the cion be from a known hardy variety, trees thus grown are reliably hardy. For these reasons your committee decidedly prefer and recommend the use of section or piece of roots in the propagation of the apple.

Your committee find the experiments conducted by Mr. Cutter, as illustrated by his exhibit, very interesting and instructing. Those made to determine the comparative value of different parts of a root when cut into three or four pieces and beginning with the first cut, which included the collar, fully show that the second cut produces a tree preferable to all the others, but does not demonstrate a sufficient difference to justify a rejection of the remaining portion of the root in propagation.

The experiments illustrated in the use of long and short cions, show that neither a very long or very short cion is desirable; that a length of from six to twelve inches produces the best results.

In conclusion, we recommend a vote of thanks to Mr. Cutter for these valuable experiments, and express the hope that he, and others, may continue and enlarge these investigations.

F. WELLHOUSE,
U. B. PEARSALL,
S. C. MASON,
Committee.

If the care of the hair were made a part of a lady's education, we should not see so many gray heads, and the use of Hall's Hair Renewer would be unnecessary.

The Poultry Yard.

STATE POULTRY SHOW.

The Kansas State Poultry show, held in Topeka, last week, was the largest and most successful ever held in the West.

It was attended by the leading poultrymen of Kansas and western Missouri. There were seventy exhibitors, and the premiums taken amounted to \$300. The premiums were promptly paid and a good balance remains in the treasury. C. A. Emery, of Carthage, Mo., did the scoring, to the satisfaction of all.

The following officers were elected for the ensuing year: President, W. A. Roberts; Vice Presidents, N. R. Nye, E. A. Haslet and C. M. Irwin; Secretary, C. H. Rhodes; Treasurer, Thomas Owen; Executive Committee—M. S. Watson, S. S. Robinson, A. K. Craig, W. F. Groesbeck, G. C. Watkins.

The success of the present show was greatly due to the efforts of C. H. Rhodes, Secretary, of North Topeka, and Thomas Owen, Treasurer, of Topeka.

The following were among the many exhibitors: S. S. Robinson, Hazelton; A. D. Hawk, Kansas City; W. C. Alexander, Everest; G. C. Watkins, Hiawatha; Henry Martin, Canton; A. K. Craig, Lyndon; C. S. Treat, Wichita; M. S. Watson, Reserve; C. M. Irwin, Wichita; Robert Murphy, Hukle; E. M. Campbell, Lawrence; W. F. Groesbeck, Concordia; Arthur Beauchamp, Concordia; J. R. Douglas, Concordia; W. R. Comstock, Dover; John C. Snyder, Constant; N. J. Boltzer, Clyde; Charles E. Hoag, Minneapolis; W. A. Roberts, Minneapolis; W. A. Stewart, Wichita; Tiff Moore, Osage City; R. H. McMillen, Chapman; N. R. Nye, Leavenworth; Geo. H. Perry, Kiowa; Geo. B. Conklin, Whiting; Mrs. B. F. Scott, Burlington; Theo. Sternberg, Ellsworth; A. F. Kinzey, Douglas; R. Stanley Stewart, Wichita; J. E. Woodford, Burlington; S. G. Sprague, Atchison; James Querollo, Kearney; W. A. Howard, Comiskey; H. P. Swerdfeger, Wichita; H. A. Wattles, Bayneville; Fred Metz, Bentonville; F. E. Barnhart, Chalk Mound.

Topeka exhibitors were: John Haman, Aaron Sheetz, C. Traver, C. A. Sparks, P. Plamondon, John Ramberger & Son, H. H. Bair, Fred Gahagan, F. G. Tompkins, M. M. Miller, D. A. Wise, H. B. Cowles, M. F. Hankla, H. E. Goddard, C. H. Rhodes, Adam Rawyer, A. C. Fox, C. B. Tuttle, Mrs. Emma Brosius, Harold Baum.

Light Brahmas.—Cock, first and second premium, M. S. Watson; third, C. M. Irwin. Hen, first, Aaron Sheetz; second, Geo. B. Conklin and M. S. Watson, tie; third, Theo. Sternberg and Geo. B. Conklin, tie; fourth, Sparks & Roger and Aaron Sheetz, tie. Cockerel, first, W. F. Groesbeck; second and third, M. S. Watson. Pullet, first, W. F. Groesbeck; second W. F. Groesbeck and M. S. Watson, tie; third, W. F. Groesbeck, Geo. B. Conklin, Aaron Sheetz and S. J. Miller, tie. Pen, first, W. F. Groesbeck; second and third, M. S. Watson.

Dark Brahmas.—Cock, first, second and third, N. R. Nye. Hen, first, second and third, N. R. Nye. Cockerel, first second and third, N. R. Nye. Pullet, first, second and third, N. R. Nye. Pen, first and second, N. R. Nye.

Buff Cochins.—Cockerel, first, R. H. McMillen; second, Chas. C. Hoag. Pullet, first, W. C. Alexander and Chas. C. Hoag, tie; second W. C. Alexander; third, W. C. Alexander and Chas. C. Hoag, tie. Pen, first, Chas. C. Hoag.

Full-Feathered Buff Cochins.—Cockerel, first and second, A. K. Craig. Pullet, first, second and third, A. K. Craig. Pen, first, A. K. Craig.

Partridge Cochins.—Cock, first and second, S. S. Robinson. Hen, first, S. S. Robinson; second, S. S. Robinson and Geo. H. Perry, tie; third, S. S. Robinson. Cockerel, first, Geo. H. Perry; second, R. H. McMillen; third, C. S. Treat and S. S. Robinson, tie. Pullet, first, second and third, S. S. Robinson. Pen, first and second, S. S. Robinson; third, Geo. H. Perry.

Black Cochins.—Cockerel, first, second and third, C. H. Rhodes. Pullet, first, second and third, C. H. Rhodes. Pen, first and second, C. H. Rhodes.

White Cochins.—Cockerel, first, F. E. Barnhart. Pullet, first, F. E. Barnhart.

Black Langshans.—Cock, first, S. S. Robinson. Hen, first, second and third, S. S. Robinson.

Cockerel, first, second and third, S. S. Robinson. Pullet, first, S. S. Robinson; second and third, C. M. Irwin. Pen, first and second, S. S. Robinson; third, D. A. Wise.

White Langshans.—Cockerel, first and second, Mrs. B. F. Scott. Pullet, first, second and third, Mrs. B. F. Scott. Pen, first, Mrs. B. F. Scott.

Barred Plymouth Rocks.—Cock, second, Arthur Beauchamp. Hen, first and second, G. C. Watkins; third, A. Sheetz. Cockerel, first, A. D. Hawk; second, G. C. Watkins; third, G. C. Watkins and Arthur Beauchamp, tie. Pullet, first, A. D. Hawk; second, G. C. Watkins; third, A. D. Hawk. Pen, first, A. D. Hawk; second, G. C. Watkins; third, Aaron Sheetz.

White Plymouth Rocks.—Hen, first, second and third, C. A. Sparks. Cockerel, first, F. G. Tompkins; second, C. A. Sparks; third, F. G. Tompkins. Pullet, first, second and third, F. G. Tompkins. Pen, first and second, F. G. Tompkins; third, C. A. Sparks.

Silver Laced Wyandottes.—Cockerel, first, Robert Murphy; second, W. R. Comstock; third, John Haman. Pullet, first and second, Robert Murphy; third, Robert Murphy and E. M. Campbell, tie. Pen, first, Robert Murphy; second, John Haman; third, W. R. Comstock.

Golden Laced Wyandottes.—Cockerel, first, J. R. and B. C. Douglas; second, Clifford Traver; third, W. R. N. Miller. Pullet, first and second, J. R. and B. C. Douglas; third, Clifford Traver. Pen, first, J. R. and B. C. Douglas; second, W. R. N. Miller.

Single-Comb Brown Leghorns.—Hen, first and second, C. A. Sparks; third, Tiff Moore. Cockerel, first, Tiff Moore; second, C. A. Sparks; third, A. C. Fox and S. G. Sprague, tie. Pullet, first, Tiff Moore and C. A. Sparks, tie; second, N. J. Boltzer. H. P. Swerdfeger and C. A. Sparks, tie; third, N. J. Boltzer. Pen, first, C. A. Sparks; second, Tiff Moore; third, N. J. Boltzer.

Black Leghorns.—Cockerel, first, W. A. Stewart. Pullet, first and second, W. A. Stewart.

S. D. W. Leghorns.—Cock, first, W. A. Stewart. Pullet, first and second, W. A. Stewart.

Buff Leghorns.—Cockerel, first and second, W. A. Stewart. Pullet, first, second and third, W. A. Stewart.

Rose-Comb Brown Leghorns.—Cock, first, H. H. Bair. Hen, first, H. H. Bair and H. A. Wattles, tie; second, H. H. Bair; third, H. A. Wattles. Cockerel, first, H. H. Bair; second, Harold Baum; third, H. A. Wattles. Pullet, first, H. H. Bair; second, H. A. Wattles; third, H. A. Wattles and H. H. Bair, tie. Pen, first and second, H. H. Bair; third, H. A. Wattles.

Rose-Comb White Leghorns.—Cock, first, F. D. Gahagan. Hen, first, second and third, F. D. Gahagan. Pullet, first, second and third, F. D. Gahagan. Pen, first, F. D. Gahagan.

White-Faced Black Spanish.—Cock, first and second, H. E. Goddard. Hen, first, second and third, H. E. Goddard. Cockerel, first, second and third, H. E. Goddard. Pullet, first, second and third, H. E. Goddard. Pen, first and second, H. E. Goddard.

White-Crested Black Polish.—Cock, first, A. K. Craig. Hen, first, second and third, A. K. Craig. Cockerel, first, A. K. Craig. Pullet, first, second and third, A. K. Craig. Pen, first, A. K. Craig.

Golden-Berried Polish.—Cockerel, first, R. H. McMillen. Pullet, first, R. H. McMillen.

Silver-Spangled Hamburgs.—Cock, first, James Thompson. Hen, first, Henry Martin. Cockerel, first, Henry Martin. Pullet, first, second and third, James Thompson. Pen, first, James Thompson.

Houdans.—Hen, first and second, W. A. Roberts. Cockerel, first and second, W. A. Roberts. Pullet, first, second and third, W. A. Roberts. Pen, first, W. A. Roberts.

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Who will protect you from those enemies—nausea, indigestion, malaria and the sickness produced by rocking on the waves, and sometimes by inland traveling over the rough beds of ill laid railroads. Such a friend is Hostetter's Stomach Bitters. Ocean mariners, yachtsmen, commercial and theatrical agents and tourists testify to the protective potency of this effective safeguard, which conquers also rheumatism, nervousness and biliousness.

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MT. PLEASANT, TEXAS,
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Suffered 8-months with strain of back; could not walk straight; used two bottles of

St. Jacobs Oil,
was cured. No pain in 18 months.

M. J. WALLACE.

A PROMPT AND PERMANENT CURE.



BRUISES.

PITTSBURG, PA.,
302 Wylie Ave., Jan. 29, '87

One of my workmen fell from a ladder, he sprained and bruised his arm very badly. He used

St. Jacobs Oil
and was cured in four days.

FRANZ X. GOELZ.

In the Dairy.

DAIRY SCHOOL WORK.

By E. S. Brubaker, read before the Kansas State Dairy Association.

An institution of this kind is built by the State, and should be located with the State agricultural farm. And such men are employed to give instruction to students as have a practical knowledge in dairy work. The student who attends the school should not be less than 18 years old, and have a common school education. The student at a dairy school is not only taught the theory but receives practical instruction in dairy work. The dairy school should receive about 5,000 pounds of milk daily. The milk is used for milk-testing, butter and cheese-making, and also to do experimental work. Dairy instruction is divided into four sub-courses.

I. Lectures and class-room work, which may again be divided as follows:

1. Constitution of milk; the conditions which affect creaming and churning; the various methods of milk-testing; the preservation and aeration of milk.

2. Bacteriology.

3. Engineering. The care and management of the boiler and engine.

4. Heating, ventilation and other physical problems connected with dairy practice.

5. Breeding and selection of dairy cows.

6. Feeding and general management of dairy cows.

7. Common diseases of dairy cows.

II. Milk-testing.—The time is at hand when patrons of all of our creameries and cheese factories will and should insist on receiving dividends according to the fat in the milk delivered by them. I think that every one within the sound of my voice will agree that to buy milk, the pooling system is unfair and unjust. In this sub-course the student is given thorough instruction how to use different milk-testers, and will also be taught to determine accurately the amount of fat in a sample of full milk, skim-milk, butter milk and whey. By the use of the test in connection with the lactometer the student will be taught to detect watering and skimming of milk. He will also be taught how to measure the necks of the test bottles in such a way as to know if they are correctly graduated. The factory operator will use the test not only to determine the fat in the milk delivered, but also in watching how closely the separator is skimming, how completely fat is being recovered by the churn, and what is lost at the whey tank. To be abreast of the times every creamery operator and cheese-maker must be thoroughly skilled in the use of the Babcock tester, which is the only one that should be used, because it is very accurate, simple and easily operated.

III. Butter-making.—The student will be taught how to lace belts, set up separators, how to run them, and will also have the opportunity of running the different makes of separators, such as the DeLaval, Alpha, Jumbo, Danish-Weston and Russian. At what temperature to separate milk, and it will be explained to him why milk is heated before run through the separator, and is shown how to test cream, to prepare a starter for ripening cream, and at what temperature to hold cream, how to take care of cream in order to get the necessary acid in cream, how to churn sweet cream, churning, washing and working of butter.

IV. The student is taught how to take care of milk in cooking, and what effect acid has in the different stages; will also be drilled in the use of the rennet and hot-iron test, both for indicating the time for drawing the whey, and when to put to press; instructions are given how to bandage, pressing and dressing of cheese, as well as the proper temperature of the curing-room and care of the cheese on the shelves. When a student has spent one term at the school, he should be employed for at least six months in a creamery as helper, then spend another term in school, and following the term he should have charge of a creamery, and be furnished with blanks to make re-

ports of his work at the end of the month. After six months have an inspector sent to his creamery, and if he reports favorably, then the student should receive a certificate. The student will be able to take hold of a creamery and run it successfully, and the creamery operator and cheese-maker will be so educated that we will have nothing but first-class butter and cheese, and thereby receive better wages for our work. I would urge every one that is interested in dairy work to use his influence toward having a school of this kind established in connection with the Agricultural college at Manhattan.

Blood tells, but nourishing food is a great aid.

Better make two loads than overload your team.

Farmers need a better knowledge of foods.

Individuality is often as marked as the breed.

Pure air and clean water are demands of nature.

Treat your hired help well if you want to keep it.

All animals need exercise according to their kind.

For Bronchitis

"I never realized the good of a medicine so much as I have in the last few months, during which time I have suffered intensely from pneumonia, followed by bronchitis. After trying various remedies without benefit, I began the use of Ayer's Cherry Pectoral, and the effect has been marvelous, a single dose relieving me of choking, and securing a good night's rest."—T. A. Higginbotham, Gen. Store, Long Mountain, Va.

La Grippe

"Last Spring I was taken down with la grippe. At times I was completely prostrated, and so difficult was my breathing that my breath seemed as if confined in an iron cage. I procured a bottle of Ayer's Cherry Pectoral, and no sooner had I begun taking it than relief followed. I could not believe that the effect would be so rapid."—W. H. Williams, Cook City, S. Dak.

Lung Trouble

"For more than twenty-five years, I was a sufferer from lung trouble, attended with coughing so severe at times as to cause hemorrhage, the paroxysms frequently lasting three or four hours. I was induced to try Ayer's Cherry Pectoral, and after taking four bottles, was thoroughly cured. I can confidently recommend this medicine."—Franz Hoffmann, Clay Centre, Kans.

AYER'S Cherry Pectoral

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass. Sold by all Druggists. Price \$1; six bottles, \$5. Prompt to act, sure to cure

CONSUMPTION SURELY CURED.

TO THE EDITOR.—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy free to any of your readers who have consumption if they will send me their express and post office address. Respectfully, T. A. Slocum, M.C., No. 183 Pearl Street, New York.

Tutt's Pills

To purge the bowels does not make them regular but leaves them in worse condition than before. The liver is the seat of trouble, and

THE REMEDY

must act on it. Tutt's Liver Pills act directly on that organ, causing a free flow of bile, without which, the bowels are always constipated. Price, 25c.

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Will Mail Free their newly enlarged Catalogue of Band Instruments, Uniforms and Equipments, 400 Fine Illustrations, describing every article required by Bands or Drum Corps. Contains Instructions for Amateur Bands, Exercises and Drum Major's Tactics, Etc. Laws and a Selected List of Band Music.



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Always the best, they are recognized as the standard everywhere. *Ferry's Seed Annual* is the most important book of the kind published. It is invaluable to the planter. We send it free. **D. M. FERRY & CO.** DETROIT, Mich.

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on their own roots are our specialty. We have grown and sold the best for 25 years. Our New "Guide to Rose Culture" contains all the secrets we have learned in that time about successful flower growing. We will send it to you gratis, together with a sample copy of our Monthly Magazine, "SUCCESS WITH FLOWERS," if you will send us your address.

The DINGEE & CONARD CO., West Grove, Pa.
Rose Growers and Seedsmen.

NORTHERN GROWN FRUIT and ORNAMENTAL TREES
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THE J. W. MILLER CO., Freeport Nursery, Freeport, Ill.

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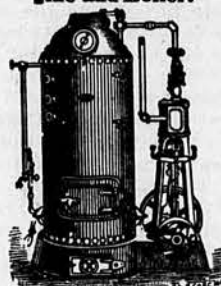
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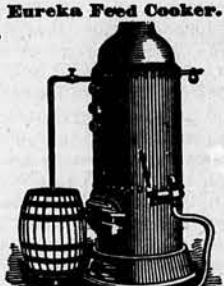
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Farming is a grand success. We have a Butter and Cheese Factory that was built five years ago and has made our community what it is now. Should you need a Butter and Cheese Factory in your community correspond with **DAVIS & RANKIN BLDG. & MFG. CO., 240-252 W. LAKE ST., CHICAGO.** Also Manufacturers of Dairy Machinery and Supplies.

The Veterinarian.

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.

WART.—We have a horse that had a wart come on him last fall. About a month ago we blistered it, and since then it has grown larger. It is largest at the top. D. S. Cambridge, Kas.

Answer.—Tie a strong cord around the base of the wart as close to the bottom as possible and let it slough off. If it does not seem close enough, apply a little nitric acid to it once a day until it is sufficiently burned down. Some warts are very difficult to cure.

LAME STALLION.—We have a valuable stallion that is lame in his left fore foot; we think it is gravel, but cannot get it cured. On smooth, hard roads he does not limp much, but when he steps in sand or loose dirt it hurts him. He is a French Norman and weighs about 2,000 pounds. C. E. R. Leesburg, Kas.

Answer.—The only symptom you give points toward navicular disease; but, as that disease is rarely ever found in such heavy horses, we are unable to give a definite opinion. Examine the bottom of the foot carefully, especially about the frog, and if you find anything new write again and describe more fully. In the meantime apply a warm linseed meal poultice to the lame foot every day for a week, and then apply a fly-blister around the foot for an inch or two above the hoof.

LAME COLT.—I have a colt, foaled last March, that, after a hard run, got lame in the right fore ankle; another run caused lameness in the right hind leg; both got well, and now it is lame in both forward ankles. The colt can stand, run or trot all right, but when walking it drops over on its toes. Answer through the KANSAS FARMER. Bucklin, Kas. H. A. S.

Answer.—The trouble is very likely not all in the ankle joint, but rather in the tendons on the back of the legs. Weak or sore back-tendons will cause an animal to knuckle forward and stumble in the manner described. Apply a blister of cerate of cantharides to the back of the legs, from the fetlock to the knee, once a month, and keep the colt's feet trimmed to proper shape, and, as it grows older, it will gradually outgrow the weakness.

SORE FOOT.—We have a cow that has had sore feet for about three weeks. The outside heel of each fore foot is sore and swollen. I first scraped her feet, then put on pine tar. I afterward washed them with soap and water and applied gunpowder and lard. What is the disease, and what is the treatment? The KANSAS FARMER doesn't owe me anything, but as your answer will benefit many others, I thought I would state my case. W. B. W. Spearville, Kas.

Answer.—Your cow's heels are either bruised or cracked from running in a filthy yard, and very likely made worse by improper treatment. Apply warm linseed meal poultices to them until the swelling is reduced, then wash them once a day with a solution of sulphate of copper, one drachm to the pint of water. We are glad to learn that the KANSAS FARMER does not owe you anything. Its aim is to keep out of debt, and those who read it carefully never fail to get full payment every issue; and even those who cannot read may receive some benefit from looking at the pictures.

STIFF NECK—QUESTION.—(1) I have a horse that cannot get his head to the ground to eat or drink, but is all right when the feed is placed about three and a half feet from the ground. His trouble began last August. He is 16 years old. (2) Please give directions how to drench a horse. Can one man do it alone? M. B. Holy Cross, Kas.

Answer.—(1) There is either anchylosis or growing together of the bones of the neck or there has been an injury to the muscles of the neck at some time. It would be impossible to give

an opinion without knowing more of the case. (2) Take a rope with a loop about eight inches long on one end, slip it down through the nose-piece of the halter and put the loop in the horse's mouth. Now throw the other end of the rope over a beam and draw the head up. This leaves the lower jaw free and the horse can get his mouth open. Now pour in the medicine, a little at a time, from a long-necked bottle or a drenching-horn. Do not try to drench through the nostrils nor pinch or pound the wind-pipe to make the horse swallow. Such things only increase the danger of choking. If the horse strangles let his head down at once. One man can drench alone sometimes, but two can do it more easily.

LAME MARE—WORMS.—(1) Will you please inform me what to do for my mare? She was kicked or hurt some way on the inside of the hock joint about one month ago. The cut discharged a yellowish, watery matter for about two weeks, and then healed over; but it is badly swollen yet, with considerable fever. She is still quite lame, and, when she steps, just as she lifts her foot from the ground the fetlock joint snaps. (2) Give a remedy for riding horses of the long, large worms that infest the bowels. E. C. S. Protection, Kas.

Answer.—(1) Blister the swollen hock every three or four weeks with cerate of cantharides until the lameness is relieved. (2) Give the following dose night and morning for a week: Powdered sulphate of iron, one drachm; tartar emetic, one drachm; powdered licorice root, one drachm; mix. At the end of the week give one pint of raw linseed oil and one ounce of turpentine as a drench. Repeat the entire treatment in three weeks.

MANGE.—My pigs, 8 months old, took to coughing about two months ago, and about one month ago some of them began to lose their hair, and later the skin began to dry up in spots and is going to rot off. When they are not too sore they rub like mad. They have been running over the farm all of the time except in October they were shut up. Their feed has been all corn except what they picked up. They sleep in a dry place where there is some dust. What is the matter, and what shall I do? H. C. A. Warwick, Kas.

Answer.—As none of your pigs have died, it is our opinion that the coughing was only due to the dust inhaled in their sleeping quarters. The other symptoms given indicate mange—a parasitic disease. Mix equal parts of salt, sulphur and wood ashes together and keep in troughs where they can get it; move the pigs to clean sleeping quarters and then burn all the litter in the old place. Now catch each pig separately and rub it all over with soft soap and let it go. In half an hour catch each pig again and wash the soap off with warm water; wipe dry and rub into the skin a mixture made in the proportion of one pint of turpentine, two pounds sulphur and four pounds of lard. This should be washed off with soap and warm water in about a week and another application made. It generally takes about three applications to effect a cure. All posts and fences, where the animals have been rubbing, should be thickly white-washed with yellow lime.

LAME STALLION.—I have a four-year-old stallion that, when I was working him bare-footed about three weeks ago, slipped and fell and the load pushed him about ten feet down hill. As he was not much lame I worked him for a few days after. About two weeks ago I took him out to hitch him up and he seemed to be crippled all over, and especially in his hind parts. He could not walk straight, but would move his hind parts off to the right. He goes straight now, but the left hind leg is somewhat stiff, and he wobbles a little in moving. The fore foot is no better. He puts his feet flat on the ground. Can you locate the trouble and tell me what to do, through the KANSAS FARMER? M. B. Holy Cross, Kas.

Answer.—We are unable to form a definite opinion from the symptoms stated, but we are inclined to think that it is partial paralysis, due to an injury received in the fall. Examine more closely and see if the horse does not handle his feet and legs in a hesitating manner, showing lack of control

rather than stiffness. Give the horse night and morning a dose composed of powdered nux vomica and powdered nitrate of potash, of each 1 drachm. Make a liniment as follows: Olive oil, origanum oil, aqua ammonia, turpentine, and spirits of camphor, of each 2 ounces. Shake well and rub in with the hand from the withers back all along the spine. Also rub it into any of the joints of the legs that may seem to need it. Rub it in twice a day until the skin gets sore, then stop a few days. Turn him loose in a box-stall. If anything new develops write again.

It is probably not the coldest weather you ever saw in your life; but that is how you feel just now, because past sufferings are soon forgotten, and because your blood needs the enriching, invigorating influence of Ayer's Sarsaparilla—the Superior Medicine.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

January 23, 1893.

CATTLE—Receipts, for twenty-four hours, 3,584. A good market was had. There was a fair run for Monday, but the demand was equal to the supply. Stockers and feeders were stronger in sympathy with butcher stock. As high as \$4.35 was paid for good feeders to go to the country.

DRESSED BEEF AND SHIPPING.

| No. | Wt. | Pr. | No. | Wt. | Pr. |
|-----|-------|------|-----|-------|------|
| 60 | 1,463 | 5 35 | 21 | 1,367 | 5 00 |
| 43 | 1,188 | 4 45 | 79 | 1,313 | 4 65 |
| 19 | 1,231 | 4 50 | 32 | 1,250 | 4 85 |
| 42 | 1,264 | 4 25 | 16 | 1,143 | 4 15 |
| 10 | 1,067 | 4 00 | 20 | 1,118 | 3 85 |

C. F. TEXAS.

| | | | | | |
|----|-------|------|----|-------|------|
| 53 | 1,250 | 4 25 | 18 | 1,135 | 3 60 |
| 50 | 1,089 | 3 45 | | | |

ALFALFA N. M. STEERS.

| | | | | | |
|----|-------|------|----|-------|------|
| 14 | 871 | 3 35 | 25 | 920 | 3 75 |
| 32 | 1,017 | 4 35 | 86 | 1,093 | 4 20 |
| 11 | 716 | 3 25 | | | |

STOCKERS AND FEEDERS.

| | | | | | |
|----|-------|------|----|-------|------|
| 1 | 710 | 1 00 | 4 | 922 | 1 75 |
| 3 | 1,070 | 2 25 | 2 | 940 | 2 40 |
| 6 | 858 | 2 65 | 8 | 815 | 2 70 |
| 5 | 1,226 | 2 75 | 12 | 794 | 3 00 |
| 28 | 909 | 3 10 | 12 | 941 | 3 15 |
| 4 | 1,024 | 2 75 | 1 | 1,110 | 1 75 |

NATIVE CALVES.

| | | | |
|---|------|---|------|
| 3 | 5 06 | 2 | 7 75 |
|---|------|---|------|

HOGS—Receipts for twenty-four hours, 4,418. A firm and fairly active market was had. The run was light and quality poor. What corn hogs offering were taken and at strong prices.

REPRESENTATIVE SALES.

| No. | Wt. | Pr. | No. | Wt. | Pr. |
|-----|-----|------|-----|-----|-------|
| 90 | 96 | 4 75 | 98 | 145 | 6 50 |
| 81 | 176 | 7 40 | 65 | 235 | 6 80 |
| 50 | 211 | 7 40 | 72 | 219 | 7 47½ |
| 49 | 240 | 7 55 | 68 | 273 | 7 60 |
| 104 | 139 | 5 00 | 70 | 283 | 7 65 |

SHEEP—Receipts for twenty-four hours, 2,375. More were in than for some time and some fine ones, but market dull and sales light, holders refusing to meet buyers' views.

230 mut. 90 4 65 418 mut. 76 3 80
231 thin. 95 2 80

Chicago.

January 23, 1893.

CATTLE—Receipts, 16,500. Market higher. Best steers, \$5.25@5.60; fair to good, \$4.50@5.75; others, \$3.80@4.25; stockers and feeders, \$2.90@3.15; cows, \$3.15@4.25.

HOGS—Receipts, 22,000. Mixed and packers, \$7.50@7.75; prime heavy and butchers' weights, \$7.75@7.95; prime light, \$7.60@7.80; light, \$7.15@7.30.

SHEEP—Receipts, 7,000. Market steady. Natives, \$4.00@4.05; fed Texas, \$4.65@4.90; Westerns, \$4.20@5.20; lambs, \$4.50@6.25.

St. Louis.

January 23, 1893.

CATTLE—Receipts, 2,800. Market was strong. Fed Texas steers, \$3.15@4.40; grass Texas, \$2.10@3.40; fe. cows, \$1.90@2.75.

HOGS—Receipts, 3,700. Market was higher. Mixed and packers, at \$7.10@7.60; prime heavy and butchers' weights, \$7.30@7.65; prime light, \$7.20@7.45.

SHEEP—Receipts, 400. Market strong. Natives, \$3.00@4.75; choice muttons, \$5.00@5.50.

GRAIN AND PRODUCE MARKETS.

St. Louis.

January 23, 1893.

WHEAT—Receipts, 74,000 bushels; shipments, 19,000 bushels. Market closed ¼¢ lower than Saturday. Cash, closing 83½¢; May, closing 74½¢; July, 74½¢.

CORN—Receipts, 200,000 bushels; shipments, 100,000 bushels. Market closed ¼¢ lower than Saturday. Cash, 36½¢; March, 40½¢ bid; May, 42½¢@42¢.

OATS—Receipts, 51,000 bushels; shipments, 18,000 bushels. Cash, 32½¢; May, 34½¢@34¢.

WOOL—Receipts, 3,000 pounds; shipments, 98,000 pounds. Market unchanged. Medium—Missouri, Illinois, etc., 2½¢; Kansas, Nebraska and Northern territory, 16¢@21¢; Texas, Indian Territory, etc., 2½¢ for choice, and 18¢@21¢ for fine to fair medium; Colorado, New Mexico, Arizona and Northern territory, 17¢@19¢. Coarse—Missouri and Illinois, 18¢@19¢; Kansas and Nebraska, 15¢@17¢ for 8 to 13 months; Montana, Wyoming and Dakota, 15¢@16¢; Colorado, Utah, New Mexico and Arizona, 13¢@16¢. Fine to good medium wool, 16¢@20¢. Fair to choice tub-washed at 30¢@32½¢.

Chicago.

January 23, 1893.

Cash quotations were as follows: **WHEAT**—Receipts, 155,000 bushels; shipments, 12,000 bushels. No. 2 spring, 73½¢; No. 3 spring, 68¢; No. 2 red, 73½¢.

CORN—Receipts, 137,000 bushels; shipments, 66,000 bushels. No. 2, 42½¢; No. 3, 39½¢@40¢.

OATS—Receipts, 240,000 bushels; shipments, 99,000 bushels. No. 2, 30½¢@30¢; No. 2 white, f. o. b., 35¢; No. 3 white, f. o. b., 33¢@33½¢.

WOOL—Kansas and Nebraska wools have been in little better sale the past week, without change in quotations. Prices range from 14¢@15¢ for the fine (heavy), 10¢@12¢ for light fine; half-blood and medium 2¢ and 4¢ per pound, respectively.

Horse Owners! Try GOMBAULT'S Caustic Balsam

A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blomishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or bluish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., Cleveland, O.

higher than the fine, with the quarter and coarse selling at the same prices as the fine medium and fine.

Kansas City.

January 23, 1893.

In store: Wheat, 1,523,371 bushels; corn, 255,007 bushels; oats, 89,352 bushels; and rye, 31,948 bushels.

WHEAT—Receipts for forty-eight hours, 158,500 bushels.

Demand good and market fairly steady. Firmer cables and the light increase in the visible supply last week encouraged buyers. Elevator men and shippers both buying. By sample on track, on the basis of the Mississippi river (local, 60¢ per bushel less): No. 2 hard, 30 cars 60 to 61 pounds at 65½¢, 1 car choice 61 pounds at 65½¢, and 1 car spring at 64½¢; No. 3 hard, 5 cars 57 to 58 pounds at 64¢, 5 cars 58 pounds at 65¢, 8 cars at 64½¢, 2 cars at 64½¢, 4 cars spring 56 and 58 pounds at 63½¢, 3 cars at 63¢; No. 4 hard, 2 cars 55 pounds at 63½¢, 2 cars at 63¢, 1 car choice at 64¢, 1 car 56 pounds at 62½¢; rejected, 1 car at 55¢, 1 car at 52½¢, 1 car stack burnt 49 pounds at 57¢, 1 car 54 pounds spring at 56¢, and 2 cars white spring at 56¢; No. 2 red, 3 cars 59½¢ to 60 pounds at 70¢; No. 3 red, 1 car at 66¢ and 1 car choice 60 pounds at 68¢; No. 4 red, 3 cars 54 to 55 pounds at 65¢ and 1 car 54 pounds at 64½¢.

CORN—Receipts for forty-eight hours, 58,500 bushels. Market fairly active. By sample on track, local: No. 2 mixed, 35¢@35½¢; No. 3 mixed, 34½¢@35¢; No. 2 white, 36¢; No. 3 white, 35¢@35½¢. Sales: 2 cars local at 35¢, 1 car local at 34¢@34½¢, 1 car Memphis at 41¢; No. 3 mixed, 5 cars local at 35¢, 2 cars local at 34½¢, 2 cars Memphis at 41½¢, and 3 cars Memphis at 41¢; No. 2 white, 8 cars Memphis at 42½¢, and No. 3 white, 2 cars Memphis at 41½¢.

OATS—Receipts for forty-eight hours, 29,000 bushels. More coming in and market slow. Buyers disposed to pick around. By sample on track, local: No. 2 mixed, 25¢@25½¢; No. 3 mixed, 24½¢@25¢; No. 4 mixed, 24¢@25¢; No. 2 white, 25¢@25½¢; No. 3 white, 24¢@25¢; No. 4 white, 23¢@24½¢. Sales: 2 cars No. 2 mixed at 29½¢, 2 cars mixed at 28¢.

RYE—Receipts for forty-eight hours, 3,500 bushels. Active. By sample on track, on the basis of the Mississippi river: No. 2, 55½¢@56¢; No. 3, 53¢@54¢. Sales: 2 cars No. 2 at 55½¢, and 2 at 56¢.

MILLET—Steady but dull. German, 35¢@43¢ per bushel, and common 30¢@35¢ per bushel.

CASTOR BEANS—We quote at \$1.43 per bushel in car lot; small lots, 10¢ less.

FLAXSEED—Selling well at old prices. We quote at \$1.04 per bushel upon the basis of pure.

HAY—Receipts for forty-eight hours, 320 tons, and shipments, 60 tons. Market dull for everything. We quote new prairie, fancy, per ton, \$7.50; good to choice, \$5.50@7.00; prime, \$5.00@6.00; common, \$4.00@4.50; timothy, fancy, \$10.00, and choice, \$9.00@9.50.

HORSES.

AUCTION.

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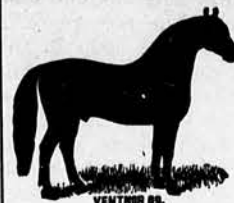
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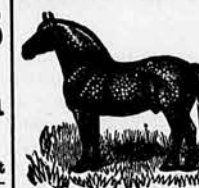
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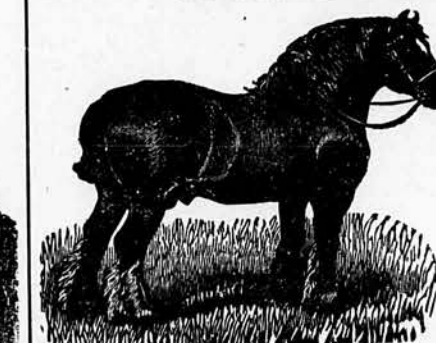
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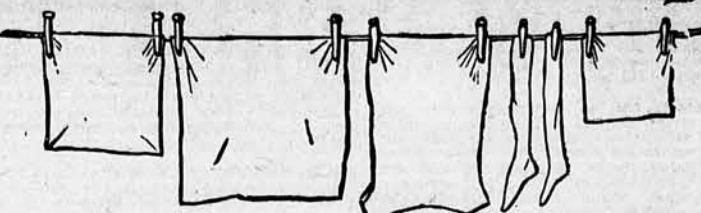
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THE STRAY LIST.

FOR WEEK ENDING JANUARY 11, 1893.

Wichita county—H. T. Trovillo, clerk.

PONY—Taken up by William Watterson, in South Slinn tp., September 28, 1892, one bay horse pony, 7 years old, branded 73X on left hip and U. T. on left shoulder.

PONY—By same, one bay mare pony, 4 years old, branded 73X on left hip and U. T. on left shoulder.

PONY—By same, one bay mare pony, 3 years old, branded 73X on left hip and U. T. on left shoulder.

PONY—By same, one bay mare pony, 4 years old, branded 73X on left hip and U. T. on left shoulder.

PONY—By same, one roan mare pony, 6 years old, branded 73X on left hip and U. T. on left shoulder.

Riley county—Chas. G. Wood, clerk.

STEER—Taken up by A. Worrel, in Zeandale tp., P. O. Zeandale, November 1, 1892, one two-year-old steer, red with white under belly; valued at \$12.

Wallace county—Hugh Graham, clerk.

COW—Taken up by Mrs. Christiana Peterson, in Stockholm tp., November 20, 1892, one red medium-size cow, brand similar to 90; valued at \$8.

HEIFER—By same, one black heifer, 2 years old, branded 22; valued at \$12.

HEIFER—By same, one red heifer, 2 years old, branded 17; valued at \$12.

HEIFER—By same, one red heifer, 2 years old, branded N. C.; valued at \$10.

STEER—By same, one red steer, 3 years old, branded 2; valued at \$10.

HEIFER—By same, one red heifer, white face, 2 years old, no marks or brands; valued at \$10.

STEER—By same, one red steer, 6 months old, no marks or brands; valued at \$5.

COW—By same, December 7, 1892, one medium-size black cow, no marks or brands; valued at \$12.

Montgomery county—G. H. Evans, Jr., clerk.

FILLY—Taken up by J. H. Burton, in Caney tp., P. O. Caney, November 24, 1892, one bay filly, 2 years old, star in forehead; valued at \$15.

FILLY—By same, one bay filly, 2 years old, left hind foot white; valued at \$15.

FILLY—By same, one bay filly, 2 years old, right hind foot white; valued at \$15.

Cherokee county—P. M. Humphrey, clerk.

MARE—Taken up by D. S. Chubb, in Lyon tp., six miles west and two miles south of Baxter Springs, one dark bay mare, 3 years old past, white star in forehead, no marks or brands visible, 14½ hands high; valued at \$25.

FOR WEEK ENDING JANUARY 18, 1893.

Woodson county—H. H. McCormick, clerk.

STEER—Taken up by C. T. Weide, in Toronto tp., P. O. Toronto, November 12, 1892, one brindle two-year-old steer, branded with two dim letters on left hip, hole in right ear.

STEER—By same, one red-roan three-year-old steer, branded X on left hip, both ears cropped, upper-bit in left ear.

Harper county—William Duffy, clerk.

4 HORSES AND COLTS—Taken up by A. A. Hiatt, in Blaine tp., December 15, 1892, one horse, one mare and two colts (sex not given), two bays, one gray and one brown, one branded U on left shoulder, one branded L. M., A. L. M., one with bald face and one with spot in face; valued at \$60.

Pottawatomie county—T. J. Ryan, clerk.

STEER—Taken up by G. O. Maxwell, in Pottawatomie tp., P. O. Cleburne, December 14, 1892, one red steer with white spots, 3 years old, under-bit out of each ear; valued at \$24.

STEER—By same, one nearly white steer, 3 years old, under-bit out of each ear; valued at \$24.

Lyon county—C. W. Wilhite, clerk.

FILLY—Taken up by James Dunn, in Center tp., December 20, 1892, one two-year-old mare colt, some white in forehead, medium size, no marks or brands; valued at \$15.

FILLY—Taken up by John Whitworth, in Emporia tp., November 19, 1892, one three-year-old black mare, blaze down forehead, three white feet; valued at \$30.

STEER—Taken up by E. J. Alexander, in Emporia tp., December 10, 1892, one two-year-old red steer, bush of tail white, broad sharp horns; valued at \$20.

MARE—Taken up by W. H. Hickox, in Center tp., December 30, 1892, one dark bay mare, 2 years old, medium size, no marks or brands; valued at \$25.

Greenwood county—J. M. Smyth, clerk.

MARE—Taken up by A. B. Hoffman, in South Salem tp., December 16, 1892, one white mare and brown sucking colt; valued at \$14.

MARE—By same, one gray mare; valued at \$10.

PONY—By same, one bay mare pony, no marks or brands; valued at \$6.

COLT—Taken up by H. H. Burt, in Fall River tp., December 28, 1892, one dark iron-gray horse colt, no marks or brands; valued at \$16.

Ottawa county—J. S. Richards, clerk.

STEER—Taken up by Wm. Hake, in Center tp., December 25, 1892, one red and white steer, 2 years old; valued at \$10.

STEER—By same, one red and white steer, 1 year old; valued at \$10.

CAFE—By same, one red and white heifer calf about 6 months old; valued at \$5.

Smith county—J. W. Holmes, clerk.

COW AND CALF—Taken up by John S. Blantynship, in Lincoln tp., P. O. Dispatch, December 31, 1892, one red cow and calf; valued at \$16.

FOR WEEK ENDING JANUARY 25, 1893.

Sumner county—Wm. H. Carnes, clerk.

PONY—Taken up by Samuel Garlits, in Buffalo tp., P. O. Caldwell, December 17, 1892, one bay horse pony, weight about 800 pounds, white hind feet and a little white on both front feet, left front foot cut with wire; valued at \$20.

Anderson county—J. T. Studebaker, clerk.

STEER—Taken up by A. M. Canady, in Lincoln tp., one red steer with some white spots, 3 years old, brand on right hip, crop off right ear, under-bit in left ear; valued at \$20.

Labette county—D. H. Martin, clerk.

STEER—Taken up by L. A. Chamberlin, in Hackberry tp., P. O. Bartlett, January 3, 1893, one light red Texas steer, medium size, no marks or brands; valued at \$20.

STEER—By same, one medium-sized light red Texas steer, no marks or brands; valued at \$20.

Jackson county—A. E. Crane, clerk.

COLT—Taken up by William Halligan, in Washington tp., P. O. Holy Cross, December 31, 1892, one brown mare colt, medium size, no marks or brands; valued at \$20.

McPherson county—O. E. Hawkinson, clerk.

HORSE—Taken up by H. G. Williams, in Empire tp., November 26, 1892, one sorrel horse, no marks or brands; valued at \$20.

Bourbon county—G. H. Requa, clerk.

STEER—Taken up by W. W. Hall, in Mill Creek tp., November 14, 1892, one red two-year-old steer, bush of tail white, ends of both ears cut off, scar or brand on left hip, weight about 1,400 pounds; valued at \$14.

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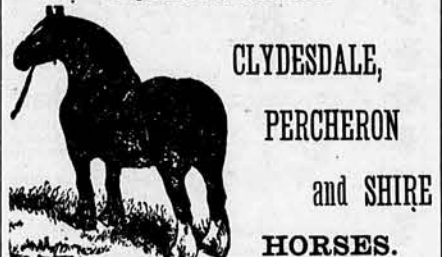
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| | Cattle and calves. | Hogs. | Sheep. | Horses and mules. | Cars. |
|---------------------------------|--------------------|-----------|---------|-------------------|--------|
| Official Receipts, 1892..... | 1,571,155 | 2,397,477 | 438,268 | 32,505 | 97,462 |
| Slaughtered in Kansas City..... | 727,981 | 1,806,114 | 218,909 | | |
| Sold to feeders..... | 213,923 | 4,260 | 29,078 | | |
| Sold to shippers..... | 446,501 | 586,563 | 48,259 | | |
| Total sold in Kansas City..... | 1,388,405 | 2,396,937 | 296,246 | 15,974 | |

C. F. MORSE, General Manager. E. E. RICHARDSON, Secretary and Treasurer. H. P. CHILD, Assistant Gen. Manager. E. RUST, Superintendent.

TREES! Don't you want the best? You need not pay the high prices! Strictly reliable; extensive assortments. Freshly dug from the ground—sure to grow. Thirty-four years established. Catalogue free. **S. M. BAYLES, SOUTH ST. LOUIS NURSERIES.** Largest Grower of Nursery Stock in the West.

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PILES, FISTULA, And all other Diseases of the Rectum cured by Drs. Thornton & Minor, Kansas City, Mo., without knife, ligature or caustics—no money to be paid until patient is cured. We also make a specialty of Diseases of Women and Diseases of the Skin. Beware of all doctors who want any part of their fee in advance, even a note. In the end you will find them expensive luxuries. Send for circular giving names of hundreds who have been cured by us, and how to avoid sharpers and quacks. Office, No. 100 West Ninth Street. Rooms 30-31-32 Barker Building.

HE CANNOT GO ANY FURTHER, NEITHER CAN WE, But if you will write to us and say you saw our ad. in this paper, we will send you Free our PRICE LIST of goods that should be in Every Family in the land. We Guarantee our goods. You will be pleased, sure. Write to-day. **CHAS. J. DOLD CO., Kansas City, Mo.**

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THE ST. JOE, The Latest, Cheapest and Best Hive made. Send for a sample hive made up with sections and starters, only \$1.25. Satisfaction guaranteed. Circulars free. **ST. JOSEPH APIARY CO.,** W. T. ABBOTT, Manager. St. Joseph, Mo.

PATENTS OBTAINED. TERMS EASY. Thirty-five years' experience. Examinations and reports free. Prompt attention. Send drawing and description to L. BAGGER & CO., Attorneys, Washington, D. C.

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Works on either Standing Timber or Stumps. Pulls an ordinary Grab in one and a half minutes. Makes a clean sweep of two acres at a sitting. A man, a boy and a horse can operate it. No heavy chains or rods to handle. The crop on 100 new acres the first year will pay for the Machine. You can now afford to pay taxes on unproductive timber land. Clear it, raise a beautiful crop with less loss and recuperate your old worn-out land by pasturing. Send postal card for literature, prices, giving price, terms, testimonials and also information concerning our New IXL Grubber. Address the Manufacturers **JAMES MILNE & SON, SCOTCH GROVE, IOWA**

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Address

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ectors of the World's Columbian
be denied the pleasure of becoming
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*The Official Souvenir
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demand for these Coins, and the de-
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CHANTS

POSSESSORS
who are earliest in seizing upon these

For The First Coin. limited, and time *must* enhance their

THE COINS:
banker, as they are likely to have
his way, send direct to us, ordering
One Dollar for each Coin ordered.

Exposition, Chicago, Ill.

100

100

A detailed black and white illustration of a dental chair and its associated instruments. The chair is a high-backed, adjustable model with a central vertical post. Various dental tools are arranged around it: a large dental mirror at the top left, a dental probe and explorer on the top right, a dental handpiece on the middle left, a dental scaler on the middle right, a dental file on the bottom left, a dental bur on the bottom right, a dental wax block labeled 'DENTAL WAX' at the bottom center, and a dental chair control panel at the bottom right. The instruments are shown in a way that highlights their design and functionality.

Repair your own boots, shoes, rubbers and harness at home by using our **NATIONAL REPAIRING OUTFIT**, a practical kit of tools and materials as shown in cut, any one can successfully use it, saves money time and trouble, sells at sight. Agents wanted everywhere. Outfit nicely boxed \$2.00. 22 pounds. Good half-soles, men's No.'s 15 cents, boys' 12 cents, women's 10 cents per pair. Send for circulars.

National Outfit Co.,
Maback Michigan

Justice to All.

It is now apparent to the Directors of the World's Columbian Exposition that millions of people will be denied the pleasure of becoming the possessors of

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*The Official Souvenir
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Throughout the Nation to unite with the Banks in placing Columbian Half-Dollars on sale. This is done that the masses of the people, and those living at remote points, may be afforded the best possible opportunity to obtain the Coins.

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\$10,000 Was Paid For The First Coin.

They are all alike, the issue is limited, and time *must* enhance their value. The price is One Dollar each.

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Go to your nearest merchant or banker, as they are likely to have them. If you cannot procure them in this way, send direct to us, ordering *not less than Five Coins*, and remitting One Dollar for each Coin ordered.

Send instructions how to ship the Coins and they will be sent free of expense. Remit by registered letter, or send express or post-office money order, or bank draft to

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FOR SALE OR EXCHANGE—Standard-bred stallion, dark bay, 16 hands, 1,300 pounds, foaled 1884. Can trot in 2:35; brother to Ottawa Chief 2:25½. He is sire of fast colts. Sound and right sure foal-getter; good brooder. Black grade coach colt, 3 years old, 16 hands, will make horse of 1,500 pounds; extra good colt in form, style, bone, etc. Black Jack, mealy points, foaled 1887, good style, form, bone, etc., 15 hands, quick performer as any horse; sure foal-getter. Will sell cheap for cash or exchange for other stock at cash price. Inquire of A. Hansen, Brookfield, Mo.

WANTED—Good traction engine. For Sale—Portable engine. S. Rohrer, New Basel, Kas.

FOR SALE—Sixty-nine acres of land, four miles from Topeka postoffice. Address J. E. McLeod, 813 E. Eighth St., Topeka, Kas.

FOR SALE—Choice pumpkin seed from the greatest stock pumpkin in the U. S. 10 cents per package. Address Mrs. Mary J. Heath, Bookwalter, O.

FOR SALE—Imported French Draft stallion. Also one three-year-old Percheron-Norman and one one-year-old of same blood. All registered and strictly first-class animals. Also ten half-blood Norman colts, nearly 4 years old, five of them mares. Will sell all or any part at prices that will make it an object to a buyer who will come and examine the stock offered. Will sell part on time, or trade for cattle. Write for particulars. Address J. Gamble, Elyria, Kas.

FOR SALE—Poultry, mated, the cockerels with fine plumes. \$5 per pair delivered at depot. Mrs. D. S. Sale, Axtell, Kas.

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FOR SALE—Forty acres fine grass land near Meriden, Kas., cheap for cash. Dr. Roby, Topeka, Kas.

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ORCHARD FARM POULTRY YARDS—S. C. W. Leghorns, exclusively (Knapp strain). Seventy-five choice young cockerels for sale, also eggs from carefully mated pens, that will produce prize-winning chicks. Birds at Emporia's last show scored 95, 94½, 93½ on cockerels and 94½ on pullets, 1894 on pen, by Emery, Judge. Honesty and full value for money received my motto. Yours respectfully, John Cone, Box 1934, Emporia, Kas.

BEING through using the yearling registered Poland-China boar, sire Lon Osgood, by Osgood, will trade for extra bred gilt. Barred Plymouth Rock cockerels for sale. John D. Ziller, Hiawatha, Kas.

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SALE—CHEAP—Fine registered Shire stallion, 3 years old last fall. Oldrieve, Florence, Marion Co., Kas.

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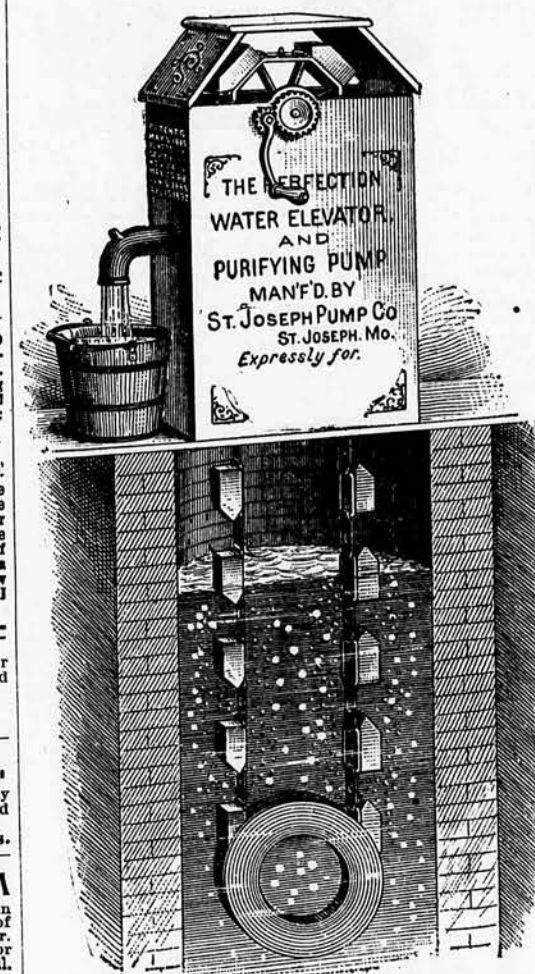
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CELEBRATED Perfection Water Elevator and Purifying Pump



Which is Intended for a Fine Home, a Moderate Home, a Cheap Home.

For the rich, those in moderate circumstances, and especially for the poor man, its durability makes it the cheapest pump on earth.

Dealers, ask your jobbers why they don't sell eight and ten cars of the old filthy cucumber or wood suction pump in a year like they used to? They will tell you the "PERFECTION" has superseded them, as well as other pumps.

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Every bucket descends full of air, and ascends full of water. For every gallon of water drawn a gallon of air (the vital element) is circulated through the water from the bottom to the top. This not only thoroughly agitates, ventilates and purifies the water, but it forces a large surplus of oxygen from the air into the water, and this surplus of oxygen is sufficient to consume all impurities or organic matter in the foulest water. It is an admitted fact by thousands using them that this purifier is the only pump that will destroy wigglers, water bugs, water lice and make foul or stagnant well or cistern water pure and sweet, removing all color, bad taste and smell. After a few days' use the old filthiness and insipidity is replaced by a sparkle like that of a mountain spring. In short, it will make bad water good and good water better.

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The undersigned will sell to the highest bidder at above date and place 10 Imported and Native French Draft Stallions from 2 to 6 years old; also 12 Imported and Native Registered French Draft Mares from 3 to 6 years old; and 2 French Coach Stallions. Stock strictly first-class. Terms of Sale.—Cash, or time of one year or longer will be given on good bankable paper, with 6 per cent. interest; 3 per cent. discount for cash. Dallas Center is 21 miles North-west of Des Moines on Des Moines & Ft. Dodge R. R. and has 3 Passenger trains each way, daily. Send for Catalogue.

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Stationary or Portable. 1 to 50 H. P. 8 to 20 H. P.

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