

KANSAS FARMER

Pres Geo T Fairchild

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BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeder's Directory for \$15 per year or \$3.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

JOSEPH FUHRMAN, NORTH WICHITA, KAS.—Breeder of French Coach and Percheron horses. Pure-bred young stock, of both sexes, for sale; also, grade animals. Prices as low as same quality of stock can be had elsewhere. Time given if desired. Inspection invited. Letters promptly answered. Mention this paper.

PROSPECT FARM—CLYDESDALE STALLIONS, SHORT-HORN CATTLE, POLAND-CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kas.

CATTLE.

VALLEY GROVE HERD OF SHORT-HORNS.—For sale, choice young bulls and heifers at reasonable prices. Call on or address Thos. P. Babst, Dover, Kas.

NEOSHO VALLEY HERD OF SHORT-HORNS.—Imported. Bucaanier at head. Registered bulls, heifers and cows at bed-rock prices. D. P. Norton, Council Grove, Kas.

ENGLISH RED POLLED CATTLE AND COTSWOLD SHEEP.—Young stock for sale, pure-bloods and grades. Your orders solicited. Address L. K. Haseltine, Dorchester, Green Co., Mo.

SWINE.

POLAND-CHINAS.—Dietrich & Gentry, Richmond, Kas., have a fine lot of fall boars and sows and two very fine young sows bred that they will sell cheap. Breeding choice. Quality guaranteed. Write or come and see us.

A. W. THEMANSON, WATHENA, KAS.—Poland-China boars. Gilts bred to Graceful F. Sanders; he is by J. H. Sanders 27219 and out of Graceful F. 63408, by A. A., by Black U. S. Sire and dam both first-prize winners at World's Fair and descendants of Black U. S.

TOPEKA HERD OF BERKSHIRES.—Strong-framed, mellow and prolific. State fair prize-winners and their produce for sale. Also, Pekin ducks of enormous size. H. B. COWLES, Topeka, Kas.

SWINE.

V. B. HOWEY, Box 103, Topeka, Kas., breeder and shipper of thoroughbred Poland-China and English Berkshire swine and Silver-Laced Wyandotte chickens.

OHIO IMPROVED CHESTER SWINE.—Pure-bred and registered. Twenty-five sows, mostly aged, bred for spring farrow. Orders solicited. H. S. DAY, Dwight, Morris Co., Kas.

FOR SALE CHEAP.—Choice Poland-China boars, pigs, Cotswold and Merino bucks, fifteen varieties of pure-bred poultry. Prize-winners. No catalogue. Address with stamp, H. H. Hague & Son, Walton, Kas.

MAPLE GROVE HERD OF FANCY BRED POLAND-CHINA SWINE.—Also Light Brahma fowls. Owned by Wm. Plummer & Co., Osaage City, Kas. Stock of all ages for sale at reasonable rates.

FOR SALE.—Duroc-Jersey pigs; also Poland-China. Bronze turkeys, Toulouse geese, Pekin ducks, Barred Plymouth Rock and Brown Leghorn chickens. Ready to ship out. J. M. Young, Liberty, Kas.

D. TROTT, Abilene, Kas.—Pedigreed Poland-Chinas and Duroc-Jerseys. Also M. B. Turkeys, Light Brahma, Plymouth Rock, S. Wyandotte chickens and R. Pekin ducks. Eggs. Of the best. Cheap.

CATTLE AND SWINE.

FANCY Poland-China Boars and Gilts. J. H. TAYLOR, Pearl, Kas.

ASHLAND STOCK FARM HERD OF THOROUGHbred Poland-China hogs, Short-horn cattle and Plymouth Rock chickens. Boars in service, Admiral Chip No. 7919 and Abbotford No. 23351, full brother to second-prize yearling at World's Fair. Individual merit and gilt-edged pedigree my motto. Inspection of herd and correspondence solicited. M. C. Vansell, Muscotah, Atchison Co., Kas.

POULTRY.

PURE-BRED LANGSHAN AND BARRED PLYMOUTH ROCK EGGS. one dollar per thirteen. Address Robert Crow, Missouri Pacific Railway Agent, Pomona, Kas.

EGGS BY MAIL.—Are not allowed, but I will send eggs by express from Buff Leghorn, Buff Plymouth Rock or Silver Wyandottes at \$1.50 per set ting. F. H. Larrabee, Hutchinson, Kas.

EGGS FOR HATCHING.—White Holland turkey, \$1.25 per 13; White Guinea and Plymouth Rock, 50c per 13. Mark S. Salisbury, Independence, Mo.

FIRE BURNED MY HOME.—And all my grain January 24, so I will sell eggs from Knapp strain S. C. White Leghorns, \$1 per thirteen, \$2 per thirty. J. R. Cotton, Stark, Neosho Co., Kas.

A. B. DILLE & SONS, EDGEMONT, KAS., breeders of choice B. P. Rocks, S. L. Wyandottes, Light Brahmas and M. B. Turkeys. Chicken eggs \$1 to \$2 per 15; turkey eggs \$3 per 11. Satisfaction guaranteed.

EUREKA POULTRY YARDS.—L. E. Pixley, Edgemoor, Kas., breeder of Plymouth Rocks, S. Wyandottes, Buff Cochins, B. and White Leghorns, B. Langshans, M. B. Turkeys and Pekin ducks. Chickens at all times. Eggs in season.

EGGS. SIXTY-FIVE CENTS FOR THIRTEEN. Combination best strains Barred Plymouth Rocks, Black Langshans, Buff, White and Brown Leghorns. For sale, young stock from Wren's Poland-China pigs. Write for prices. No better stock in the West. Zachary Taylor, Marion, Kas.

"THE PROOF OF THE PUDDING IS IN THE EATING." The proof of good poultry is the show-room. At the State show, January 8-14, 1895, my birds took two first and three second premiums, and only six birds were shown. Eggs for hatching from as well-bred Barred Plymouth Rocks and Light Brahmas as are in the West, for only \$1 per thirteen. Stock for sale. Henry E. Peers, Marion, Kansas.

BRONZE TURKEY EGGS.—Average score of eighteen hens and toms 97½. Toms score 97½ and are from first premium stock at World's Fair. Eggs \$2 for 11. S. L. Wyandotte and S. C. B. Leghorn \$1.50 for 15. Mrs. F. W. Ives, Knob Noster, Mo.

17 Years Breeders of B. P. Rocks exclusively. Birds raised on four farms. We shipped 9,500 in 1893-94 into eighteen States and Canada. Eggs \$1 for 13; \$2 for 30; \$3 for 100. Eggs packed safe to ship any distance. Good hatch guaranteed. Send for circular. Joe Cunningham & Co., Loree, Miami Co., Ind.

E. E. AXLINE, OAK GROVE, MISSOURI, (Jackson Co.) Barred Plymouth Rocks. Bred from the best strains and judicious matings. Eggs \$1 per setting of fifteen. Satisfaction guaranteed.

SWINE.

Thoroughbred Duroc-Jersey Hogs Registered stock. Send for 44-page catalogue, prices and history, containing much other useful information to young breeders. Will be sent on receipt of stamp and address. J. M. STONEBRAKER, Panaola, Ill.

SWINE.

SELECT HERD OF BERKSHIRES

Have for sale pigs from State fair winners. Can fill classes for show. Boars for fall service. A few choice sows bred. Address G. W. BERRY, Berryton, Shawnee Co., Kas.

S. McCULLOUGH, Ottawa, Kansas. Breeder of Pure-bred BERKSHIRE SWINE. Stock for sale at all times. Satisfaction guaranteed. Write for what you want.

BERKSHIRES.

We offer choice selections from our grand herd, headed by a great imported boar. New blood for Kansas breeders.

WM. B. SUTTON & SON, Russell, Kansas.

T. A. HUBBARD, Rome, Kansas. Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

THE WOOD DALE BERKSHIRES

Champions of Two World's Fairs. New Orleans, 1885, best herd, largest hog any breed. At Columbian, Chicago, won ten out of eighteen first prizes, the other eight being bred at or by descendants of Wood Dale. New blood by an 1894 importation of 21 head from England. For catalogue Address N. H. GENTRY, SEDALIA, MO.

JAMES QUORLO, MOSCOW, MO.

Breeder and shipper of prize-winning Large Berkshire Swine. S. C. Brown Leghorns and Bronze Turkeys. Headed by King Lee 11. 23801, Mephistopheles 32412.

BOURBON COUNTY HERD, English & Berkshire & Swine.

J. S. MAGERS, Prop., Arcadia, Kas. Imported and prize-winning American sows headed by Imp. Western Prince 32202. All selected and bred to head herds and to supply those wanting none but the best. Fall litters now can't be beat. Write or come visit me and see the herd.

J. W. BABBITT, HIAWATHA, KAS.

BREEDER OF Regist'd Berkshire Swine 45 in herd, headed by Lord Majestic 34768, a son of Imp. Lord Windsor 30461; dam Imp. Majestic 30460. 6 boars, 12 gilts, by Model Duke 11. 22467, and 9 fall of 1894 farrows, both sexes, for sale. Write or come.

BERT WISE, breeder of Poland-China Hogs, Holstein Cattle and Barred Plymouth Rock Chickens of choicest strains. Butcher's Darkness No. 68468 and Ideal U. S. Nemo at head of swine herd. Only choice stock shipped on order. Sows bred and a few extra good young boars for sale. Three are out of my Orient sows. Write your wants. Satisfaction guaranteed. BERT WISE, Reserve, Brown Co., Kas.

GEORGE TOPPING, Cedar Point, Kas. (CHASE CO.) Importer, breeder and shipper of

LARGE ENGLISH BERKSHIRE SWINE of best families and breeding. Choice pigs for sale at low prices. Also Single-combed Brown Leghorns and Mammoth Bronze turkeys. Eggs in season. Farm 6 miles south of Cedar Point. Mention K. F.

JOHN A. DOWELL'S HERD REGISTERED POLAND-CHINA SWINE. Robinson, Brown Co., Kas.

130 head, all ages, headed by Onward 8981 S., sired by George Wilkes. He is assisted by Tecumseh Wilkes, sired by General Wilkes 21927. The females belong to the best strains. Come or write.

JOHN KEMP, North Topeka, Kas., breeder of improved Chester White Swine. Some fine young boars fit for service for sale. Correspondence invited.

STANDARD POLAND-CHINA HERD.

CHAS. A. CANNON, Proprietor, HARRISONVILLE, CLATSOP COUNTY, MISSOURI. Breeder and shipper of registered Poland-China swine of the best strains. Herd headed by Chow Chow 9908 B., assisted by a Black U. S. son of Imitation 27185 O., also a son of Tecumseh Jr. 10207 O. 220 head in herd. Young boars and gilts yet on farm. Write or come and visit me.

BARRED PLYMOUTH ROCKS EXCLUSIVELY. All high-scoring birds. Have bred Plymouth Rocks for thirteen years. Yard headed by cockerels scoring from 92½ to 94 points, including a cock sired by the World's Fair winner, scoring 94 points by Pierce, and a 93½ point cock from I. K. Felch's yards. Have shipped eggs to all parts of the United States. Eggs \$1 per thirteen or \$2 for thirty. I guarantee satisfaction. Send for circular. D. B. CHERRY, Knoxville, Marion Co., Iowa.

CATTLE.

SUNNY SLOPE FARM,

C. S. CROSS, Proprietor, Emporia, Kas.

Breeder of PURE-BRED HEREFORD CATTLE. Herd headed by Wild Tom 61592, a son of Bean Real 11055 and assisted by sons of Cherry Boy 26475, Archibald 1st 39258 and Washington 22615. 200 head, all ages, in herd. Strong in the blood of Lord Wilton, Anxiety and Horace. A choice lot of young heifers, fit for any company. Bulls all sold. Correspondence solicited, or, better still, a personal inspection invited.

SHANNON HILL STOCK FARM.

G. W. GLICK, ATCHISON, KAS.

Breeds and has for sale Bates and Bates-topped SHORT-HORNS. Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Waterloo Duke of Shannon Hill No. 89879 and Winsome Duke 11th 115,137 at head of herd. Choice young bulls for sale now. Visitors welcome. Address W. L. CHAFFEE, Manager.

MAKIN BROS. Hereford Cattle.

Choice stock for sale of both sexes. We will sell any individual, a carload or the whole herd at reasonable prices. Write or come and see us. Address Florence, Marion Co., Kansas.

locked by the subsoil

A. E. STALEY, Ottawa, Kansas. CHESTER WHITES AND POLAND-CHINAS. Light Brahma eggs \$1.50 for 15.

ROCK QUARRY HERD.

N. E. MOSHER & SON, SALISBURY, MO.

Fifteen choice Poland-China sows bred to Mosher's Black U. S. and Faultless Wilkes for sale; ten choice young boars ready to go; six young Hereford bulls. Also eggs for sale from Black Langshans scoring 94 to 95½ and from a choice lot of Light Brahmas and Mammoth Bronze turkeys.

W. S. ATTEBURY, Rossville, Kansas. BREEDER OF Chester Whites Exclusively. Young stock at all times. Satisfaction guaranteed.

HOLSTEIN-FRIESIANS

Careme 21's Jacob Prince of Twisk 404 heads herd, backed with butter record of over 35 lbs. in 7 days. Young bulls for sale. Red pigs in pairs, heavy bone, good color, dams often farrowing 14 pigs. Males Duroc Jersey Reds ready for service. Poland-China males ready for use. Pigs of all ages in pairs not related. Young gilts, either breed, bred if desired. Pigs shipped at my risk. Pedigrees furnished. M. H. ALBERTY, Cherokee, Crawford Co., Kas. Mention FARMER, AND POLAND-CHINAS.

2,806 Weight of Two Lbs. O.I.C. Hogs Sold 1673 in 1894 for breeding purposes. Send for a description of this famous breed. First applicant from each locality can have a pair on time and agency. THE L. B. SILVER Co. Cleveland, O.

(Breeder's Directory continued on page 16.)

FARMERS!

Prevent Your Hogs From Rooting By Using the Genuine



WOLVERINE

HOG RINGER AND RINGS. Best and Cheapest in the market. For sale at Hardware and General Stores. Made by Heesen Bros. & Co., Tecumseh, Mich.

One Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 4—Winterscheidt Bros., Horton, Kas., Poland-China swine.
OCTOBER 9—Geo. W. Null, Odessa, Mo., Poland-China swine.
OCTOBER 22—F. M. Lall, Marshall, Mo., Poland-China swine.
OCTOBER 23—C. G. Sparks, Mt. Leonard, Mo., and G. L. Davis, Elmwood, Mo., Poland-China swine.
OCTOBER 24—H. C. Snyder, Corder, Mo., Poland-China and Berkshire swine.
OCTOBER 30—L. N. Kennedy, Nevada, Mo., Poland-China swine.

RED POLLED CATTLE.

EDITOR KANSAS FARMER:—Your correspondent, in issue of April 10, asks "the opinion of those competent to judge, but not prejudiced by interest," concerning the merits of Red Polled cattle. I would suggest to Mr. Dryden that he write to Mr. T. V. Hills, of Delaware, O., for his pamphlet, which will give all the information any reasonable man can wish in favor of this beautiful and excellent breed of cattle. To do justice, Mr. Dryden should state to Mr. Hills that he learned of him through the KANSAS FARMER, and drop a suggestion that an advertisement in that excellent journal would be beneficial to himself. Yet Mr. Hills is "prejudiced by interest," but not, I hope, to such an extent as to cause him to print other than the truth.

I am, perhaps, not a "competent judge," having learned of the merits of these cattle principally from others. Have been reading about them for the past ten years, and became so "prejudiced" in their favor that last winter I paid \$100 and cost of transportation for a cow, which has brought me a fine bull calf. I therefore became "prejudiced by interest" to such an extent as to place a little advertisement in the "Two-cent column" of KANSAS FARMER to dispose of this calf, because he is akin to his mother (which, like Jeffries' son, he could not help). Intending to give him a name, I have named him "Jersey Red." He is a fine specimen of the breed, and I am sure that he will prove a valuable addition to any stock. I am in love with these cattle. (1) Because they are the most beautiful of all cattle, being always red and all red, and hornless, symmetrical in form, having long bodies, low down. In countenance they possess a peaceful, docile, look, a look of satisfied contentment beaming from the eye. That none other of the bovine tribes possess. (2) I am in love with them because of their usefulness, vying with the Holstein in filling the pail at milking time, and will raise a calf of which the feeder, when he comes to buy your calves, will not say: "I do not want that black and white one. He won't fatten." And when your Red Poll has served her time of usefulness at the pail, and you take her to the butcher, he will not say: "That old bony black and white cow won't dress 40 per cent." I am "prejudiced by interest." I own a purebred Holstein cow. They vie with the Jersey in filling the larder at churning time, and when you sit down to milk a Red Poll, her large, shapely, well-placed teats fill your hands, while the lacteal fluid flows freely. You don't have to take hold with thumb and index finger and strip like you were milking a nanny goat. Besides, Red Polls don't have to be kept in a hand-box and perfumed with cologne. They have constitutional vigor. I am "prejudiced by interest" again, as I have some grade Jerseys. They vie with the Short-horn, Hereford and Angus for producing early-matured, juicy beef. (3) I am in love with them because they are hornless, and that means much. Also nearly all the progeny of thoroughbred bulls, from horned cows, are hornless.

I have always been an advocate of this method of dehorning, and about seven years ago I wrote an article which appeared in KANSAS FARMER. Shortly after, I received a handsome circular from L. F. Ross, of Iowa City, Iowa, then President of the Red Polled Cattle Club, on which he had written: "Thank you for your sensible article in KANSAS FARMER, 'Breed the Horns'."

Off." That made me feel quite proud; perhaps emboldens me now, to attempt to write this scattering article.

WILKIE BLAIR.

Beulah Land farm, Beulah, Crawford Co., Kas.

Polled Durhams.

EDITOR KANSAS FARMER:—I see in your issue of April 10 a request for information regarding Red Polled cattle. Why did he not ask also for information regarding the Polled Durhams that are advertised in *Breeder's Gazette*? I see by advertisements that they are recorded in the "Short-horn Herd Book." I have never seen any of them.

B. F. GEHMAN.

Hutchinson Kas.

Going Back to Stock.

EDITOR KANSAS FARMER:—It is dry—no rain yet. Many farmers are waiting, others are planting. Should it rain, a very large crop of corn, Kaffir corn and cane will be planted. But little oats have been sown; some barley, but neither is doing well.

The sorghum sugar mill at this place will not be operated this season. It seems to be a failure, but caused more from management than lack of output. The farmers are very sore over their losses, many of them not having received anything for their cane for last year.

Barber county is certainly proving herself to be a good fruit country. Last year our orchardists thought they had a bonanza, but this year will eclipse last year. Just now the plum, peach, apple and apricot indicate a very large yield. Grapes are not so promising, having been frozen to main stem in many places. Small fruits are also injured by the severe freezing.

The wheat crop is almost an entire

0.9039. Equivalent record at full age, 28 pounds 8.93 ounces.

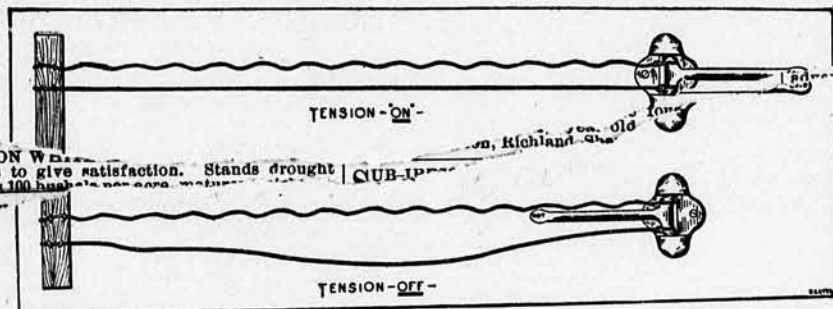
Amendments to the by-laws were agreed to: (1) Making the fee for membership \$25, with herd books supplied free. (2) Providing that the board of officers shall elect an Executive committee, consisting of President and Treasurer and Secretary *ex officio*, and three of the members. (3) Offering to duplicate premiums won by Holstein-Friesian cows registered in this association in public competition with other breeds, in test of butter. The board of officers to designate the fairs where such premiums are to be offered, and the total amount not to exceed \$1,000. (4) To offer and award prizes not to exceed in value \$1,000 for authenticated butter records, under same regulations as last year. (5) Appropriating \$2,000 for the establishment of a literary bureau for disseminating information about the breed and booming the Holstein interest in all sections.

The following officers were elected: President, D. F. Wilber, Oneonta, N. Y. Vice Presidents—Sylvester Burchard, Hamilton, N. Y.; M. R. Seeley, Farmington, Mich.; E. T. Bedell, Springfield, Iowa; W. J. Gillett, Rosendale, Wis. Directors—D. H. Burrell, Little Falls, N. Y.; W. J. Hayes, Ravenna, Ohio, and Henry Stevens, Lancon, N. Y. Treasurer, William Brown Smith, Syracuse, N. Y. Secretary and Editor, Frederick L. Houghton, Brattleboro, Vt. Superintendent of Advanced Registry, S. Hoxie, Yorkville, N. Y.

Buffalo was selected as the place of next meeting, and the date the third Wednesday in March, 1896.

How Do You Measure a Hog?

EDITOR KANSAS FARMER:—I have just measured my two-year-old Poland-



PAGE COILED SPRING FENCE WIRE.

failure; but few fields show any vitality.

Our residents feel hopeful, although they have been having a crucial test. The signs all point to stock, and as this county is and has always been free range, with plenty of running water and natural shelter, stockmen are beginning to turn their attention exclusively to pastoral pursuits.

Some farmers are putting in irrigating plants, but it is difficult in many places to reach the underflow so as to procure sufficient water for irrigation purposes.

Medicine Lodge, Kas., April 15.

Holstein-Friesian Breeders.

The tenth annual meeting of the Holstein-Friesian Association of America was held at the Park Avenue hotel, New York, March 20. There was a good attendance of members. The Secretary reported a gratifying increase in membership, the total number of members now being 457. The Treasurer's report was also satisfactory, showing a balance of \$15,056 on hand.

Superintendent of Advanced Registry, S. Hoxie, made a lengthy report on the tests made during the past year, when \$1,000 was distributed in prizes by the association for weekly butter records. The best record was that of Mutual Friend 3d 28389, owned by T. G. Yeomans & Sons, Walworth, N. Y. The test was conducted by Prof. H. H. Wing, of Cornell Experiment Station. Test began November 20, 1894. Age of cow at time test began, 3 years 2 months 24 days. Days from calving, 17. Total pounds of milk given, 409 3-16. Average per cent. of butter fat in milk, 4.27; highest per cent. fat 4.9; lowest, 3.6. Total pounds of fat in milk, 17,472. Total pounds of butter (80 per cent. fat), 21.84. Pounds required of a cow at that age, 11,471. Her per cent. in excess of requirement,

China sow, Judith 31808 S. She is in breeding form, not fat. From end of nose to root of tail she is 5 feet 3 inches; around girth, 5 feet 1 inch; around flank, 5 feet; from front of hock joint over back to front of the other hock joint, 4 feet 4 inches.

Will some of our many swine breeders tell whether this is a well-proportioned hog or not? Also, will some one tell what parts to measure, and naming starting and stopping points, so as to convey an idea of a hog's conformation?

Beulah, Kas.

Preventing Horns.

This is the method pursued by Mrs. M. E. Nelson, of Wichita, Kas., for keeping the horns off her cattle: She takes the calves from one to three weeks old; wraps a stick of caustic potash with tinfoil or other article, leaving one end of the caustic free, and wetting that end she applies it briskly to the little horns. "Be careful," she urges, "to prevent the caustic from contact with your own flesh or that of the calf, except a space the size of a silver dime immediately upon the embryonic horn. When the horn is burned out, apply cider vinegar to the sore, after which fill the cavity with finely pulverized alum. In most cases the bleeding will be slight. The above treatment may have to be repeated in two or three weeks if the first application fails. I have used this method of preventing horns for three years with unvarying success."—*Exchange*.

Spring is full of terrors to all whose constitution is not able to resist the sudden changes of temperature and other insalubrities of the season. To put the system in condition to overcome these evils, nothing is so effective as Ayer's Sarsaparilla. Take it now.

A Sufferer Cured

"Every season, from the time I was two years old, I suffered dreadfully from erysipelas, which kept growing worse until my hands were almost useless. The bones softened so that they would bend, and several of my fingers are now crooked from this cause. On my hand I carry large scars, which, but for



AYER'S

Sarsaparilla, would be sores, provided I was alive and able to carry anything. Eight bottles of

Ayer's Sarsaparilla cured me, so that I have had no return of the disease for more than twenty years. The first bottle seemed to reach the spot and a persistent use of it has perfected the cure."—O. C. DAVIS, Wautoma, Wis.

AYER'S

THE ONLY WORLD'S FAIR
Sarsaparilla

AYER'S PILLS Promote Good Digestion.

Miscellaneous Notes.

Onions are great health-givers; grow and eat them.

In the regions of no winter farmers have no season of rest.

A dairyman must be pretty well off if he can afford to keep a poor cow.

It does not follow that one is a scrub milker because he first scrubs the udder clean.

If we could only agree on how to get good roads as easily as we can on their desirability!

Are you not glad you put up ice? It will help make a possibly hot summer much cooler.

One of the best road materials is common dirt moistened with the sweat of road-workers, but it is rarely used.

Your straight lime whitewash is a great purifier and deodorizer, and in the gentle spring-time it should be applied.

The farm brood mare is the most useful animal on the place; for goodness sake treat her kindly and feed her well.

Have lots of melons for the family and the harvest hands; they cost but little and the tropics produce nothing so delicious.

The distance between the pig and the hog, the calf and the ox, is not so long as it used to be; "early maturity" shortened it.

A dairy in hot weather without ice is much like a kitchen without good fuel—prolific of trials, exasperation and indignation.

FOR COUGHS, ASTHMA AND THROAT DISORDERS "Brown's Bronchial Troches" are an effectual remedy. Sold only in boxes.

A New Talking Machine.

It differs from the phonograph in this: The latter only repeats what is said to it, while this machine takes both sides of the argument and will convince the inquirer in a moment that there is but one safe way to build wire fence, namely, to recognize and provide for contraction and expansion, and one interview will generally satisfy him that the continuous coiled steel spring is the only practical method yet discovered. The cut (on this page) was made from a photograph of two machines, the upper one shows the coiled wire and the straight wire stretched exactly alike, as they would appear in a new fence, in the other, the lever is thrown back, loosening both wires, precisely the same, and it shows how little the "Coiled Spring" is affected, while the straight wire is rendered entirely useless for fence purposes. While in practice these changes will not occur so suddenly, they are none the less certain whenever there are changes in temperature, or animals crowd or run into the fence.

The mission of this little instrument is simply to introduce the subject and call the attention of those who need fence to the Page Woven Wire, which is built on this identical plan, and is the only elastic fence offered. The real fence also has the knack of "speaking for itself," delivering lectures on "The Advantages of Self-Government," "Attention to Business," "Keeping Everlastingly at it," etc. Write the Page Woven Wire Fence Co., Adrian, Mich., and learn all about it.

Agricultural Matters.

SUBSOILING FOR CORN.

In growing corn it is important to select the varieties that are prolific in ears of corn and in grain rather than in size or length of cob or stalk, and abundance of fodder. Sixty-two pounds shelled corn from seventy on the cob is not too much to expect. This precaution is necessary, especially in this part of the "corn field," because our conditions of climate and soil induce too great a growth of those less valuable parts of the plant. It is well known by experienced farmers with us that any large variety of corn that may be cultivated continuously for a number of years will result in much greater growth of stalk and fodder than is essential or desirable—much greater than would accompany the growth of the same amount of corn in an equal yield per acre in corn fields in any prairie country lying north of Kansas or east of the Mississippi river.

It was probably this quality in our corn that induced the old farmer and his wife, when looking at our corn at the Centennial Exhibition, to remark that probably the stalks were spliced. When assured by the genial Kansan in charge that the stalks were not spliced, "Well, dad," the old lady remarked, "it didn't all grow in one season." This excessive growth of stalk is detrimental to the crop. As a rule the large plant requires a greater time to mature or reach the stage when its ear is securely out of the reach of a drought, as dry weather of more or less severity is always imminent in the corn belt during the month of August. It follows that the fields that have outstripped other fields to the extent of one week or ten days or a fortnight in time generally are much better at gathering time. Another objection: The husker in many Kansas corn fields finds the ears above his convenient reach, and the fodder-cutter finds it burdensome to handle these heavy stalks. In consideration of these facts we find it expedient frequently to use seed from Nebraska or Iowa. This foreign seed, properly selected, has been generally satisfactory. I cannot give names of varieties that would be most profitable, as it is the practice of corn-growers generally to select from neighbors or through farmers of other neighborhoods, or from other counties or States, the variety of seed they may prefer without much regard to names. Selection of seed corn through seed men has often been attended with disappointment.

The preparation of the ground for planting is an important factor in securing a profitable crop, and a different course should be pursued here to that practiced in other States where winter and early spring rains fall in greater abundance. We find fall or early winter plowing at as great a depth as practicable the better way. I am strongly in favor of following the stirring plow (which should be fourteen or sixteen inches wide, run at a depth of five or six inches, or deeper if your team will do it,) with a Perine subsoiler or properly subsoil stirrer. This implement consists of a very strong frame and bull-tongue with a long, sloping point not over three inches wide, and may be run at a depth of seven to fifteen inches in the bottom of the other furrow. The depth this subsoiler may be run will depend on the condition and quality of soil and the strength of four of your best horses or six lighter ones. Dry weather should not deter you from using the subsoil stirrer. Last fall when very dry I used this plow after a fourteen-inch plow that had run some five inches in plowing a thirty-six acre field of compact, dry subsoil. Being extremely dry the subsoil was broken up in large lumps and completely filled the furrow on a level with the unplowed land. The next round of the large plow raised this level some five or six inches; in consequence my thirty-six-acre field after plowing had five or six inches greater altitude than before. The fine surface soil being turned upside down on this lumpy, loose subsoil would sift through and would certainly put it in condition to retain a much

greater amount of water than it would have done without this deep stirring. If the farmer be inclined to use a lister both for planting and fall plowing, this subsoiler may as profitably be run behind the lister. This fall preparation of your corn fields will insure you a preservation of the greatest amount of moisture from the winter snows and showers and a finely-pulverized surface as a seed-bed and moisture-preserver for the early spring and summer months.

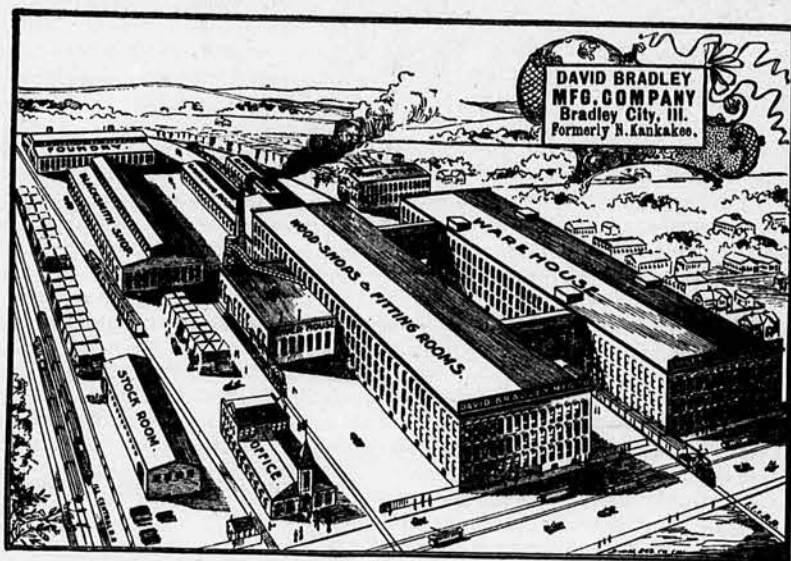
With this preparation of soil if rainfall has been abundant do not plant before the 20th of April to the 10th of May (a little earlier will do if dry) that you may have a quick growth and even stand of three stalks to the hill if checked; if listed, one stalk every twelve or sixteen inches, as to strength and nature of the soil. In checked corn better two stalks than four and better one than five.

The preparation of your ground before planting is of greater consideration than after cultivation, but every step is important. If the season is dry you should harrow or drag with a clod-breaker before planting whether you had fall or spring-plowed. If listed pulverize the surface of both ridges and furrows before planting. If, on the other hand, there is a fair or excessive amount of moisture this dragging or harrowing should be omitted. If dry weather continues after planting and your soil was well prepared for seed there should be no hurry about cultivating. If, on the other hand, you have had heavy rains during the spring, waste no time until you have

adopted for the purpose of retaining the moisture for growing crops.

If we look over the methods of the last fifteen or eighteen years of farming in our county, we find that the methods, generally, if not universally, have been about as follows: Beginning with corn, which is the great staple, the ground was listed without previous plowing. Where fall plowing was done it was always quite shallow so as not to interfere with the listing in the following spring. When oats were sown they were sown in the corn stalks, without previous plowing, simply cultivated and harrowed. It has been the prevailing opinion that deep plowing was not the proper thing to do for a crop of wheat, so that in the time before mentioned shallow plowing or no plowing has been the rule in our county. I do not claim that this method has been successful.

But the question under discussion is how to retain moisture in the soil for the use of growing crops. I assert that past methods are about the worst that could be adopted for this purpose. First, because in times of heavy rains the surface or loose soil, being very shallow, is very soon wet to saturation; the subsoil, being very compact, does not permit the water to penetrate; it runs off, carrying with it vast amounts of soil and fertility. I have observed that the bottom of the furrow at the usual depth of plowing is exceedingly hard and compact, caused, in my opinion, by the plowshare cutting to the same depth year after year when plowing is done, putting me in mind of the plastering of a building. In order to



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plowed and pulverized the surface after the ground is in good condition. If your land is clean or otherwise, new or old, do not fail to give it four or five plowings, not to exceed two to four inches. Get close enough to the corn to remove or cover up all weeds, but guard against disturbing the corn roots with the cultivator, especially at the later plowings—more especially if the weather is dry.

The painstaking farmer in the corn belt should expect forty to sixty bushels to the acre with a good season. Seventy-five or eighty bushels is a phenomenal yield and is not often secured from the most favored fields if we apply the inexorable steelyard and tapeline. If the application of these never-deceptive implements could be used to determine our annual yields by States our general averages would doubtless be reduced one or two bushels to the acre.—J. F. True, Jefferson Co., Kas., in *Breeder's Gazette*.

How Shall We Retain Moisture in Our Soil.

Paper read before the Brown County Farmers' Institute, by S. Detwiler.

The past year's drought has directed the mind of every observant farmer to the matter of retaining moisture in the soil. The committee saw fit to call on me for a paper on this subject, but this is a subject that scarcely interests the farmers of Brown county in ordinary seasons, as the usual amount of rainfall is ordinarily sufficient to produce abundant crops.

It is my opinion that our past methods of manipulation of our fields is probably the very worst that could be

harden and smooth the surface the workman repeatedly goes over the surface with the trowel before he leaves it in the perfect condition required to finish the wall. It seems to me that this is not the ideal condition of subsoil for retaining moisture or for growing crops, but just the opposite of what is required by growing crops. I am not competent to give you, gentlemen of the institute, the scientific names of the components of the soil—the chemist and the geologist must do that—but confine myself entirely to the mechanical or physical condition of it. After thorough and deep plowing, so as to let the rains go down deep, I have no doubt that vegetable mold, whether in shape of clover or barnyard manure, is another excellent retainer of moisture in the soil, provided the soil has been deeply stirred so as to permit the rains to penetrate when they do fall.

A bit of experience in deep plowing in the fall of 1893: August, I plowed twenty-seven acres quite deep, deeper than it had ever been plowed before; sowed to wheat in latter part of September following; harvested forty-two bushels of wheat last harvest, being from six to ten bushels above the average of surrounding fields sown at the same time. The last fall I procured a subsoil plow which I used on about sixty acres of land, part of which I intend to plant to corn and part to oats. The future alone can determine the wisdom of the work, but if we have a sufficient amount of moisture to saturate this loose subsoil I expect good results from it.

It has been advocated at these institutes that all the elements of fertility to plant food lies in the first four inches

Many men
of many minds



say that



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of soil. This theory I do not believe, but, on the contrary, I firmly believe that there is a rich store-house of plant food below, that only needs to be unlocked by the subsoiler and then the soil gradually deepened with the stirring plow and made available by the penetrating rains, and by so doing we will at the same time reduce the wasting of both soil and fertility by the constant washing of our fields during heavy rains.

Now, brother farmers, in addition, I will say that, as the larger part of my paper is theoretical, would like to hear a full and free discussion of the matter. If my premises are at fault, the reasonings are also erroneous and the whole matter of retaining soil moisture will have to be sought in some other source.

I forgot to mention at the proper place in this paper that one of the most effectual methods of retaining the moisture in the soil for the use of plants is perfect fineness of the surface and frequent shallow cultivation, thus making a mulch of fine soil on the surface, never allowing a crust to form after a rain, nor allowing weeds to use the moisture that is needed by the growing crops.

I am aware that whenever some method or change is suggested in farming that requires more labor or work, it is immediately condemned by the average farmer, but, on the contrary, when a method is suggested by which a man and team can cover a few more acres it is immediately taken as a sure method of getting rich. Our motto should be to get the largest possible return from the fewest acres and leave the best possible condition for future crops. This method outlined will solve the other problem, what to do with the surplus horses. Put them to work on your farms, plow deep, cultivate frequently and shallow, thus retain the moisture for your crops, kill the weeds and utilize the horses.

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Irrigation.

IRRIGATION THE ONLY WAY OUT.

Read by P. I. Lancaster, at the Sherman County Farmers' Institute.

Irrigation is our quickest way out, our surest way out, our only way out.

My friends, we are late listening to reason. We have wasted eight years of our lives (what would I give to have those eight years back to devote to irrigation!) We have wasted one-fourth of our manhood chasing an *ignis fatuus*—a chimera—living under the delusion that Sherman county was not in arid America; that corn and wheat and oats and barley would return us from year to year bountiful harvests of golden grain; that all we needed was land, more land—a half-section was but a garden patch—640 acres were barely sufficient for an ordinary wheat field. Could we but have foreseen the delinquent tax list for 1895 we would have taken the statement of the Frisbees, the Bassetts, the Winters, and of the other silver-tongued locators in regard to this new El Dorado, with a little more margin; have been just a trifle more conservative in putting out all our nest eggs where God's sunlight always shines.

Judge Gregory has somewhere said, in one of his irrigation articles, that "that singular phenomenon which once happened in western Nebraska, sometimes occurs in our western counties. It occasionally rains." At any rate it used to rain before the locators left. I have begun to believe that those same locators possessed the magic art of rain-making, and that Montgomery, Jewell, et al., who

Sailed balloons and spouted gas,
And fired bombs till it came to pass
That all the fields were bare of grass,
And nature blew for quarter,

are but sorry imitators. Yet many of us were so influenced by this bomb-firing and gas-spouting as to put faith in their ability to cinch the drought. So we planted not only our stock of grain, we put our last pennies in the venture.

But then we began to curse the dry,
Watching the clouds and wondering why
We missed the raindrops' patter,

and I'll tell you, confidentially, we have missed them for some time, both the raindrops and the raindroppers.

How many widows and orphans in the East regret that it ever did rain in western Kansas. This it was that caused them to loan their money on our farms, and instead of them receiving their semi-annual interest from us they have to send quarterly consignments of aid to enable sufficient voters to live in our counties to maintain our county organizations so we can elect officers to post them of the amounts of delinquent taxes against their securities.

So, gentlemen, you ought to be satisfied by this time that waiting for the pattering raindrops will never enable you to pay your debts.

Then listen to what can be done if we make the raindrops patter—if we irrigate.

It is not my task to prove to you that Sherman county has the underflow, that this can be economically lifted to the surface. You surely are already convinced of these things, for they have been made as plain to the intelligent mind as "way to parish church." I have been asked to tell you of some of the benefits we may expect to derive from bringing this underflow to the surface in Sherman county.

But for the fact that I am requested to entertain you for twenty minutes, I would simply say (and would I not say enough?) it will enable you to support your families, enable you to pay your debts. Ah! what a thing "to be devoutly wished for," for is not this success? Is not this more than you have done heretofore? But irrigation will do even more than this. It will change your bare, unsightly sods into decent shaded homes, into fit dwellings for intelligent farmers; will permit you to live, not barely exist; will make you dependent upon your exertions alone, and independent of droughts and public aid.

My friends, I am sure I am well aware of the fact that but for the charity of others many of you would have

been unable to have lived through the winter, but I am also as fully aware of this fact: that if western Kansas is to be a permanent charity farm, I, as a self-respecting American, feel like abandoning my attempt to make a home here. You have been depending for a livelihood on the seasons, and now this is your condition after eight years of hard, honest toil. You didn't know what work was or what privations were until you came to western Kansas. And the wages for all this labor—the result of all these years of the best of your manhood—what are they? You and your families are dependent upon charity for your victuals and clothing. One of my first memories of western Kansas was a vivid picture of its urgent necessities—people freezing and starving. That was some years ago. Is it not worse this year than ever before? Are you not afraid of our charitably-disposed friends becoming tired of supporting you out here—that they may write for you to come back and live on their county poor farms, where you won't cost them so much and where they can look after you better?

What is the trouble? Is it with us or with Sherman county? Farmers, it is with us. We have not yet learned the peculiar climatic conditions that obtain in arid America. We have farmed as if we were yet in Illinois or Missouri—risk all—put out our last farthing in wheat and corn. Extensive farming it is called. Expensive and crazy farming I call it. Oh, yes, sow your 200 or 400 acres in wheat every spring and reap a harvest of aid flour every winter!

Let me impress on you, friends, it is high time we were learning this new farming—this intense farming—for we may not be able to get much aid another winter.

I don't mean to suggest that we can never raise corn or wheat here, but I do say pick your seasons. Don't go in for "extensive farming" unless you have the chances of a good season in your favor. Think of the thousands of acres of grain we sowed in the dust during the past two years—how foolish! There was no show at all for a harvest.

Such are the years when irrigation will prove its value.

I am no wild-brained enthusiast—claiming that irrigation will make George Gould envy us our Sherman county farms, but I do know from practical experience, that a properly-managed irrigation plant will enable us to keep from debt and aid; that one acre of land, wisely watered and cropped, will be of more value to each family than the cost of your living expenses has been during the whole year of 1894. You may not be able to make your garden support you the first year, through lack of experience in managing water, planting seed and keeping yourselves away from town every other day. For I can tell you that to successfully irrigate you must get a good, steady all-season hump on yourselves. You can't do as you have been doing—work two weeks in March and spend the rest of the year in front of George Hess' hardware store, at first bragging about how much wheat you are going to make, and along about June moaning about how much you would have had if—

Well, you must forget all about ifs when you irrigate. "Shall" and "will" are the winning words. And if there are no ifs in your labor, there will be no ifs in the harvest.

While I am writing this, the boys come in to tell me it is raining. Yes, raining hard; so I must put down my pen and feel a genuine, heaven-given raindrop. And I did go out, and thought surely this could not be arid America, for there were plenty of good, wet raindrops—not the dry, shriveled product of the rain-makers—but those of God's own kind—full of life and freshness. And then I thought how many millions of dollars had been spent trusting to just such clouds—reasoning once a rain and always rain. Why, had it rained in February when I first came to Sherman county, Frisbee would have gotten me to have built on the highest snow-capped peak of the Smoky.

"My dear man," he would have said,

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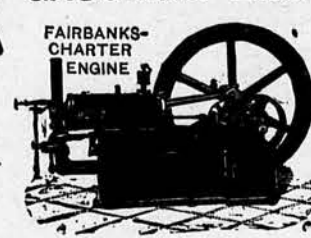
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'don't you see the seasons are changing. Never rained here in February since the ark was launched. Why, sir, you will see the time before your children attain their majorities, when you will ship your wheat and corn down the navigable Smoky on 'whale-backs' run by natural gas.'

I don't mean to dissuade you from risking the season this spring. I myself believe we will raise a crop; but I do say don't put in as much as you have heretofore done. What you do sow, sow it well. Have some time for fixing up your irrigation pond and mill; for, mark my words, although I expect Sherman county to produce this year a fifteen bushel an acre wheat crop, yet along about July and August you will wish for some of your neighbors' irrigated vegetables.

If we each irrigated but one acre this year, you would find the results to be so gratifying that next year twice the acreage would be under water; that in five years our lands would command a staple value; that we, with our orchards, our fish, our fruits and vegetables would be independent and happy.

So, in conclusion, let me impress on you that irrigation is our only salvation, our only hope, our only chance of weathering it out in arid America, and of leaving to our children something better than the good will of our aid friends.

Experiments With Irrigation in Utah.

The Utah Experiment Station has issued Bulletin No. 38, on "Seepage Waters and the Underflow of Rivers."

During the summer of 1894 many measurements were made of the canals and tributaries of Ogden and Weber rivers to determine, if possible, whether water could be diverted and applied to the surface of cultivated areas in the upper valleys without injury to the priority users in the lower valleys. The preliminary investigations, which extended through July and August—a period much too brief in which to base accurate results—seemed to demonstrate the accuracy of the following statements:

1. That the diversion of water from a stream and its application to the soil in the upper valleys in the early part of the irrigation season when water is abundant, increases the available supply to the irrigators of the lower valleys in the latter part of the season.
2. In most cases a time is reached, usually about midsummer, when no portion of the water diverted from the stream in the upper valleys reaches the lower irrigators in time to benefit them. Such diversion and use damage the irrigators of the lower valleys.
3. In some instances the outflow from the upper valleys during July and August was much greater than the inflow, although a large part of the inflow was used for irrigation purposes.
4. The behavior of irrigation waters in any drainage system can be determined only after a series of carefully-

made measurements extending over a period of years, and that much ill-feeling, trouble, and litigation would be avoided if the State would collect the necessary data.

Bulletin 39 treats of "Farm and Orchard Irrigation." It reports results of a number of irrigation experiments, most of them covering a period of five years. The first experiment, which is discussed by A. A. Mills, is the amount of water to use for different crops, and is summarized as follows:

1. On clay soil the maximum yield of both wheat and straw was obtained by saturating the soil, approximately, two feet deep at each irrigation, or covering the ground with 26.82 inches of water during the season.
2. On this soil there was a decrease of crop where either a more or a less amount of water was used.
3. This maximum yield was secured by the use of 26.82 acre inches, which is equivalent to a cubic foot per second for twenty-seven hours, nearly.
4. Though the water that drained from the soil through excessive irrigation was richer in fertilizing material than when applied, the total amount of this material added is more than that extracted.
5. On clay soil containing more sand the yield of grain (wheat) increased as the water increased up to 40 inches, while the maximum yield of straw was produced with 16 inches of water.
6. On clay soil containing little sand timothy gave mixed results, though where the maximum amount of water (41.3 inches) was used the yield was the greatest.
7. On clay soil containing more sand the first crop of clover increased steadily and rapidly from the use of 4.2 inches of water up to 12.9 inches. The application of 5.2 inches more of water decreased the crop nearly one-half.

These bulletins are now in press and may be obtained on application to the office of the Experiment Station, Logan, Utah.

In the letter of Senator Boyd, of Greeley, Colo., to A. H. Cox, of Quincy, Kas., on "Potatoes by Irrigation," published in the FARMER of last week, the types made him say: "A pumping plant having a capacity of 350 gallons per minute is a most valuable one," etc. It should have read "850 gallons per minute," etc.

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United States Irrigation Investigation.

The following general statements, covering most of the questions usually asked concerning the character and results of the investigation of water supply, irrigation, and related subjects have been sent out by the Director of the United States Geological Survey:

"In the prosecution of the field work of this survey and of its predecessors—the exploration and mapping of great areas of the public lands—the broader questions of irrigation and of possible reclamation of portions of the arid region were of necessity constantly in mind. The possibilities of this region were brought to the attention of the public in 1878 by Major J. W. Powell's 'Report on the Lands of the Arid Region of the United States,' which was an outgrowth of the earlier surveys. In 1887 the Director of the Geological Survey was called upon by Congress to consider the questions of irrigation, and by joint resolution of March 20, 1888 (Statutes at Large, Vol. 25, p. 618), he is authorized and directed to make examinations relating to water storage, the volume of streams, and similar questions.

"By act of October 2, 1888 (Statutes at Large, Vol. 25, p. 526), the Irrigation Survey was created, and by act of March 1, 1889 (Statutes at Large, Vol. 25, p. 960), it was extended; but its operations were abruptly terminated by discontinuance of appropriations August 30, 1890. The act of this date (Statutes at Large, Vol. 26, p. 391), repeals the law affecting withdrawals of public lands, but leaves on the statute books authority for investigating the extent to which the arid regions of the United States can be redeemed by irrigation and for field work.

"Congress by various enactments has recognized and distinguished two classes of investigations pertaining to irrigation. On the one hand, it has placed under the Department of Agriculture the consideration of questions of immediate practical importance to the individual farmer, such as methods of cultivating the soil by irrigation, these being nearly related to the work of the botanist, the soil physicist, and other experts. On the other hand, those subjects relating to water resources and to the possibility of future development of the public lands—subjects which are of interest to the citizens as a whole and which necessitate broad surveys, measurements and field investigations—have naturally been joined to the surveys of similar character in the Department of the Interior. By this classification the examination of the resources of the country, whether in minerals, in solids or in waters, comes under one head and is joined to the administration of the public lands.

"Systematic measurements of streams of the arid region and a study of water resources were begun under the Irrigation Survey, and some of this work has been continued as incidental to topographic surveys. By the act of August 18, 1894 (Digest of Appropriations for 1895, p. 270), a specific appropriation was made for this class of work, and a further appropriation therefor was made by the act approved March 2, 1895, the item reading as follows: 'For gauging the streams and determining the water supply of the United States, including investigations of underground currents and artesian wells in arid and semi-arid sections.'

"The reports of this survey relating to irrigation have been published as parts of the annual report of the Director. The first annual report of the Irrigation Survey forms part 2 of the Tenth Annual Report of the United States Geological Survey, 1888-89. It consists of 123 pages and is devoted mainly to preliminary plans and a statement of progress. The second report of the Irrigation Survey forms part 2 of the Eleventh Annual Report of the United States Geological Survey, 1889-90. It contains 393 pages, 30 plates and 4 figures, and describes the river measurements, the surveys for canals and reservoirs, and the general topographic mapping, giving at the end a list of irrigation literature. The third annual report of the Irrigation Survey forms part 2 of the Twelfth Annual Report of the United States Geological Survey, 1890-91. It contains 576 pages,

93 plates and 190 figures, and describes the reservoir sites selected, the hydrography of the arid regions, and it includes, also, a paper upon irrigation in India. The fourth report on the subject forms part 3 of the Thirteenth Annual Report of the United States Geological Survey, 1891-92. This contains 486 pages, 77 plates and 119 figures, and consists of four papers: 'Water Supply for Irrigation,' 'American Irrigation Engineering,' 'Engineering Results of the Irrigation Survey' and 'Topographic Maps and Reservoir Sites in Arkansas River Basin, Colorado.'

"The above-named volumes comprise the series devoted exclusively to irrigation. The demand for these has been so great that the supply of many of them was quickly exhausted. Copies can be now obtained, if at all, only through members of Congress, or by purchase.

"The Fourteenth Annual Report of this survey, 1892-93, contains a paper on 'Results of Stream Measurements,' by Mr. F. H. Newell. The data upon water supply obtained after the publication of this volume was not inserted in the Fifteenth Annual Report, 1892-93, but will probably appear with other material in the Sixteenth. Mention may also be made here of the volume of the Eleventh Census, 'Agriculture by Irrigation,' prepared also by Mr. Newell, in the preparation of which the results of work by the survey have been used.

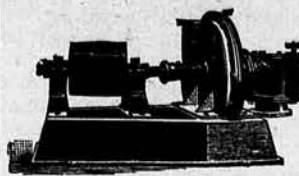
"The work now in progress, under the appropriation above quoted, consists of measurements of streams in various parts of the United States, especially in the West; the investigation of artesian conditions, mainly in the Dakotas, Nebraska, Kansas and Texas, and the general study of water supply, whether for power, irrigation or domestic use, together with the dependence of water resources upon topographic or geologic conditions. As the amount of money available for such work is exceedingly small in comparison with the vast area of the country and the widespread demand for results, both South and West, co-operation is sought with all individuals and officers of States, institutions or companies able in any way to assist. By this means, economy, efficiency and unity of action are secured."

Irrigation From Wells.

EDITOR KANSAS FARMER:—In the FARMER of the 10th inst., a column was given to a statement of the contents of a new pamphlet by Secretary Coburn. I wish to call further attention to part III. of that pamphlet, which is entitled, "Notes on Some Kansas Wells West of the Sixth Principal Meridian and Their Water Supply."

In the introduction to those notes it is stated that the wells are about 270 in number and that they are from sixty-three counties. It is further said that half of them are railway wells. The principal lesson to be learned from the railway wells, is that there is a great volume of water to be obtained by pumping. Is that volume enough for irrigation? The tendency of the notes, as a whole, is to say that it is. Of the 130 or 140 private wells mentioned, thirty-two are used for irrigating from a quarter of an acre to seven or eight acres. Those who have done a little in the past are preparing to do more. These results seem to verify a statement of the writer, made several years ago, that the water of wells on the high prairie may be used to irrigate from three to five acres on most quarter sections of the western counties. I would like to emphasize this as being an amount that insures a living in the dryest years to every man who diligently uses his opportunities. In wet years he can make a profit from the other part of his farm. By subsoiling he can be sure of some crops on larger areas than his irrigated land every year.

In the notes referred to it is seen that some wells have had their flow measured by observing how much the pump yields in a good wind for an hour or a day. In others there has been no measurement taken. In some it is vaguely stated as so many barrels, sometimes the barrel being the standard barrel and in other cases it is a



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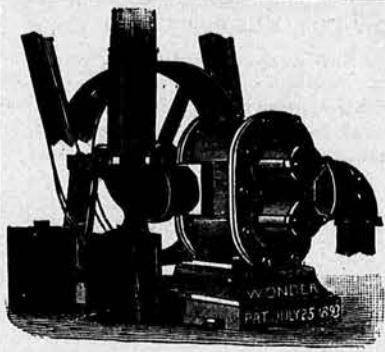


WONDER PUMP.

FOR • IRRIGATION • PURPOSES.

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coal oil barrel that is meant. In some, an idea of the quantity of water is suggested by stating that twenty-five, fifty or 200 head of stock have been watered from the well. I suppose ten gallons per day for a horse or a steer or a cow would be considered a minimum supply. Twenty-five gallons would probably not be considered too much in hot weather. I want to suggest that *water sufficient for an ox would be sufficient for a tree*. An eminent orchardist in this State has often said that a healthy apple tree 5 years old is worth as much as a cow of the same age. There are other trees that in western Kansas would probably be more valuable than apple trees. The point I would make is, that an orchard of twenty trees will be worth as much as twenty head of cattle, and forty trees as much as forty head, and they will want no acreage of grass land and no feeding in the winter. They can be watered as easily as the cattle can. I don't say "sell your cattle and plant orchards." I say plant enough of trees to always have a surplus of fruit, and give them as much water as you would give to the same number of cattle. Subsoil the orchard, so that water will go down low enough, and make some holes near each tree to be filled with loose earth or gravel, so that you can always supply water directly to the roots. By subsoiling and winter irrigation you can gradually extend the area that *will be certainly productive every year*, and so have a constantly increasing assured prosperity.

The notes were collected by Secretary Coburn and published by him in the belief, as is stated in the introduction, that the information therein contained will be of service in the part of the State to which it applies. I wish here to suggest one way in which the service may accrue and further to urge all readers to send 6 cents to Topeka and get the pamphlet.

ROBERT HAY.

Junction City, Kas.

One Acre With One Gallon of Gasoline.

SYRACUSE, KAS., April 7, 1895.

Mr. E. B. Cowgill, Editor KANSAS FARMER:

SIR:—In regard to your inquiry as to our plant, will say, we have a success in it. The plant consists of a Menge pump and a Weber gasoline engine. The engine is a No. 4, nine horse-power, and does the work with ease and we heartily recommend it to any and all who want a power. It will do all it is recommended to do and we believe more. We are lifting water seven feet high with a Menge pump. It is made in New Orleans. We are throwing two hundred thousand gallons per hour (200,000). Our engine only takes about one gallon of gasoline per hour. We can irrigate one acre per hour with our plant. We can only say it is a perfect success and can recommend both engine and pump to any and all.

Respectfully yours,

H. C. PRICE & BRO.

Kansas Birds.

Our friends in feathers ought to be very near and dear to all the friends and lovers of animate life. What boy or girl or man or woman has not seen and come to love the birds that about their homes fill the air with music and the beauty of glancing wings? How many of our readers would be glad to know the names and habits of their feathered friends! Here is a book by Prof. N. S. Goss, State Ornithologist, that

tells us all about "The Birds of Kansas." Not only about the birds themselves, but their habits, their nests, their eggs, their homes, their foods and their uses and value to mankind. From this delightful volume we may learn what a wonderful service the birds render to agriculture, to pomology and to gardening. Between three and four hundred kinds of birds in Kansas in uncounted numbers stand between our people and the almost total annihilation of all their crops, by the warfare they continually make on the rabbits, moles, mice, rats, gophers, lizards, frogs, snakes, grasshoppers, moths, beetles and the innumerable swarms of insects and grubs that prey upon grains, fruits, vegetables and flowers. Kill off suddenly all these winged ministers of man and the human race would starve. The foes of man would sack the citadel of field and orchard and garden.

Prof. Goss was a most enthusiastic lover of birds, as the Goss ornithological collection at the State house attests. It is the pride of every true Kansan, and just before his death he completed his life work in a splendid book of several hundred pages on "The Birds of Kansas." That book ought to be in thousands of private libraries in the State and in that of every city, town, village and school district, from Colorado to Missouri. In almost every instance, to know a bird is to know a friend. Very few of them are enemies. Even the hawks that, driven by hunger, now and then steal a chicken, do a vast scavenger work in ridding the fields of marauders. We can well afford to forgive them a little mischief now and then in view of the splendid service they render, just as one may forgive his favorite Jersey cow for occasionally wandering into the garden. The book is admirably illustrated, and issued by Crane & Co., of Topeka, who are without question the leading publishing house in Kansas. In them the birds have a friend, for they have made this master bird book "as fine as a feather."

No Change to Chicago.

The through service offered the traveling public by the Union Pacific system and Chicago & Alton railroad is unsurpassed. The Perfect Passenger Service of the C. & A. with the well-known excellence of the service of the Union Pacific assures the traveling public that they "are in it" when they patronize this popular joint line from Denver to Chicago and intermediate points. Pullman Palace sleeping cars, dining cars and free reclining chair cars without change.

For all information apply at 525 Kansas Avenue.
A. M. FULLER,
City Agent, Topeka.

Wheat has been the lowest-priced farm product during the past year, in spite of the farmer's good friends, the wheat gamblers, who "sustain prices" for the purpose of "benefiting the farmer."

NOW! THE TIME TO MAKE MONEY.

Last month I cleared, after paying all expenses, \$235.88; the month before \$186.86 and have at the same time attended to my regular business. I believe any one, anywhere, can do as well, as I have not a particularly good location and not much experience. When you have an article that every family wants, it is very easy selling it. It seems strange that a good, cheap dish-washer was never before placed on the market. With the Perfection, which sells for \$5, you can wash and dry the dishes for a family in two minutes, without putting the hands in water. As soon as people see the washer work, they want one, and that is why so much money can be made so quickly. For full particulars address The Perfection Mfg. Co., 807 63d St., Englewood, Ill. I feel convinced that any lady or gentleman, in any location, can make \$5 to \$10 a day, as every family will very soon have a dish-washer. Try it and publish your experience for the benefit of others.

ALICE O.

PATENTS

Practical ideas worked out for patterns and models by expert Machinists at the
TOPEKA FOUNDRY CO.,
Corner Second and J. Sts., TOPEKA, KAS.

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.

SAILING AWAY.

Sailing away with the wind abeam,
And the wide, wide sea before,
Sailing away in a lover's dream,
To the port of the golden shore;
Idle hands on the rudder bands,
Hope in the sunrise fair,
And hearts as light as the sea-bird white
Afloat in the morning air.

Love, in the dawn of that far-off time,
Did you guess of the weary way?
Dearest, when life seemed a summer rhyme,
Could we tell where we went astray?
Silent tears through the coming years,
Darkness for you and me,
And doubt and dread of the wilds ahead
Fell chill as we sailed a-sea.

Sailing ashore with a waning wind
On the glass of a dreaming tide,
Leaving the dark of the deep behind
For the light of the other side;
Loosen hands from the rudder bands!
Ah! to the margin foam
Come breath of land o'er the golden sand
Oh! sweet is our welcome home!

—New York Weekly.

THE PICTURE IN MY HEART.

In each man's soul there lives a dream
Lit by a woman's eyes,
Whose glance is like the tender gleam
That thrills the evening skies.
It is a dream that never fades
Though weal or woe befalls,
But haunts the heart, and softly paints
A picture on its walls.

In each man's heart there floats a voice
That speaks to him alone,
The voice of her, his spirit's choice,
He longs to call his own.
The days may hasten like the wind,
Or lag with sullen feet,
Some day his wondering heart shall find
The face he longs to meet.

—New York Weekly.

ARTISTIC FIREBOARD.

How to Effect a Desirable Transformation of an Old Fireplace.

Grates are quite fashionable, and most modern houses are furnished with one or two in addition to the usual provision for stoves. But in some houses, especially in old farmhouses built twenty-five or thirty years ago, the fireplace was made for use, with little regard for beauty. Now, these have become an eyesore to people who have grown up without even having once used them. Usually the first step toward a remedy is to shut the opening with a board; but this is often little better than that which it hides. If covered with paper, the paper is likely to crack along the seams.

A friend seems to have solved the problem, however, in a fairly satisfactory way. The mantel and fireplace were extremely plain, and the fireboard was of bare yellow pine boards, with which she was never pleased. At last, an idea struck her; she would turn the family artist, and nearly every family has one, to some account. The board



AN ARTISTIC FIREBOARD.

was covered tightly with double-width, unbleached muslin, and then the cloth beaten full of starch paste to fill all the pores. When this was dry, it was painted all over with common white lead, and made ready to turn over to the artist, who, by the way, is generally enough of an artisan to do the entire work.

On this board the artist painted a design representing bent-iron work over-run with wistaria, the metal work done in bronze or brown (see cut). In the center is a bracket supporting a lovely blue porcelain vase, in which grows a clump of iris. Of course the flowers should be painted in their usual colors, but the design may be changed or modified to suit the fancy. However, flowers and vase should always be in harmony with each other. This is

especially the case here, as the blue vase, purple iris and purplish wistaria combine to make a beautiful, yet modest and unpretentious piece of work. The fireboard when finished, coupled with a pretty lambrequin, brings about quite a desirable transformation of the old fireplace, to the great satisfaction of all.—Rural New Yorker.

HOW TO KEEP YOUNG.

The Daily Nap a Useful Aid in the Preservation of Beauty.

American women might learn an advantageous lesson of their French sisters in the art of keeping young. But it is no receipt for cosmetics that they would acquire. First of all, French dames do not worry, or if they do they conceal the fact admirably. They are apparently on the crest of the wave of good fortune perpetually. Next, and almost equally important, they decline to hurry. They take life moderately, perform their duties without haste and linger over their pleasures. And in these two simple rules lies a mine of wealth for her who is wise enough to appropriate it.

The daily nap is a valuable auxiliary to preserving youth. And, speaking of rest, Mrs. Alma Calder Johnson deplors the fact that the little flap of flesh once wont to cover our ear orifices at will is no longer in working order. "It was at one time, you know," she says, "just like our eyelids, and could thus shut out sound as readily as the former could shut out sight. Now, however, we must resort to artificial means to rest our tired tympanums. I often think what a blessed privilege it would be to be able to stop up our ears whenever we wanted. There is nothing that rests me like closing my eyes, and I make a practice of always doing so in street cars and like places. Thus I gain odd minutes of repose, with comparatively little expenditure of time."—Philadelphia Times.

SOME NOVEL NAPERY.

Banquets Which Are Spread Upon a Veritable Cloth of Gold.

An effective lunch cloth seen recently was of the thickest, smoothest, finest damask of a pure gold color. It was dappled with a leafy design, also in the gold, the pattern being perceived only by the wearing of the fabric. No other color was permitted upon the table, the service being of dead white porcelain, while the flowers were lilies of the valley. The whole effect was a table covered with priceless samite that Tennyson talks so much about on a sheet from the Field of the Cloth of Gold.

Unless a hostess can indulge in such rare magnificence, however, a plain white luncheon cloth is always in the best taste. Just now it is the fad to have these hemstitched and bordered with drawn-work, though not too elaborately, as anything pronounced, unless it be of the most elegant description, is out of place upon the table. A fairly good quality of damask, 2½ yards long and with a neat little drawn-work border, may be purchased for \$22.25. For those who prefer colored luncheon cloths there are extremely attractive ones in dull blue, old rose and yellow, and these have cheapness as well as durability to recommend them, for they cost but \$12 or \$13 in the two and a half and three yard lengths. The latest and most popular design in table linen of all sorts is the scroll pattern.—N. Y. World.

The French Woman's Way.

Here lies one of the great secrets of the French woman's success in matters of dress. She studies her characteristics and peculiarities, and then chooses her gowns and mantles accordingly. If a style that is in vogue will not adapt itself to the outlines of your figure, then put it to one side and choose instead something less novel that will add to your charms instead of detracting from them. If a color that is the rage does not suit your complexion, or the color of your hair or eyes, discard it in favor of a shade less new that will enhance your good points instead of clashing with your natural coloring. If the latest style of dressing the hair does not harmonize with the outline of your head don't have anything to do with it.

"The Farmer's Ready Reference, or Hand-Book of Diseases of Horses and Cattle." Descriptive circular free. Address S. C. Orr, V. S., Manhattan, Kas.

Highest of all in Leavening Power.—Latest U. S. Gov't Report

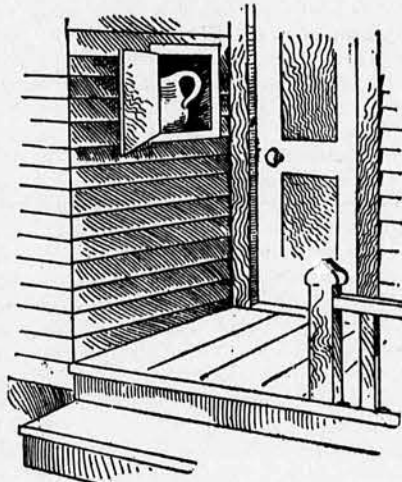
Royal Baking Powder

ABSOLUTELY PURE

OUTSIDE MILK CLOSET.

A Trifling Thing But a Great Convenience to the Housekeeper.

Where a person must depend upon a milkman for his milk, the outside closet that is represented in the sketch may be taken advantage of, particularly if one is building a new house or remodeling an old one. Where the milk is left early in the morning upon the doorstep or piazza, it is at the mercy of wind and weather, and of prowling cats and dogs, even when a closed vessel is used for the milk. Where such a milk closet cannot be made, it might be found of advantage to make use of a



OUTSIDE MILK CLOSET.

small box beside the door, having a hinged cover. One would certainly enjoy his milk—even if it were somewhat blue—much better if there were no suspicions accompanying it concerning visits of cats and dogs.—Orange Judd Farmer.

How to Keep Ants Away.

In a recent issue of the Old Homestead, we read this about keeping ants away, and as it may help some beekeeper who is troubled by ants, we give it a place here: Rub a light film-coat of balsam Peru around near the bottom of table or kitchen safe legs—just a narrow band will do—and renew the balsam every two or three weeks. This will keep ants away from tables, kitchen safes, etc., and what they hold or contain, provided there is no other ant-way than up the legs. One drop of balsam Peru spread around the upper part of a sirup bottle will keep the ants away for months. Boil one ounce of balsam Peru in one gallon of rain-water for half an hour, and sponge this water, while hot, over wooden floors and walls, and it will keep ants away for a long time.

There is more Catarrh in this section of the country than all other diseases put together, and until the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease, and prescribed local remedies, and by constantly failing to cure with local treatment, pronounced it incurable. Science has proven Catarrh to be a constitutional disease, and, therefore, requires constitutional treatment. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, Ohio, is the only constitutional cure on the market. It is taken internally in doses from ten drops to a teaspoonful. It acts directly on the blood and mucous surfaces of the system. They offer one hundred dollars for any case it fails to cure. Send for circulars and testimonials. Address, F. J. CHENEY & CO., Toledo, O. Sold by Druggists, 75 cents.

To the Traveling Public.

Before purchasing tickets to points east of Chicago, first ascertain the rate to that point over the Nickel Plate road. City ticket office, 199 Clark street, Chicago, Ill.

How to Make Swallow Bows.

"Swallow bows" are now taking the place of butterfly bows, and are made in this way: Take a stiff glace ribbon two or three inches wide and cut one end with long, sharp points like a swallow's tail. Place a loop below, which represents the thickness of the bird's body, and then two side ends cut in diagonal points for the wings. With a rosette as a finish this makes a very effective bow. A charming hat trimmed with two of these swallow bows, one on either side, was of black leghorn, with fluted brim and a full red June rose in each flute.

Temperature of Curling Tongs.

A great deal of hair is ruined by curling tongs being too hot. The tongs do little harm at a lower temperature, and by taking a little more time the curls are just as good.

The Latest Handkerchiefs.

New handkerchiefs have scalloped and daintily embroidered borders and it is the correct thing to sew narrow lace around the scallops sufficiently full to give a ruffled effect.

Homes for the Homeless.

The opening of two Indian reservations in northeastern Utah to settlers opens up over three and one-half million acres of fine agricultural and stock-raising land for home-seekers.

The Uintah and Uncompahgre reservations are reached by the only direct route, the Union Pacific system, via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

Ely's Cream Balm has completely cured me of catarrh when everything else failed. Many acquaintances have used it with excellent results.—Alfred W. Stevens, Caldwell, Ohio.



CATARRH

ELY'S CREAM BALM opens and cleanses the Nasal Passages, Allays Pain and Inflammation. Heals the Sores, Protects the Membrane from colds, Restores the Senses of Taste and Smell. The Balm is quickly absorbed and gives relief at once.

A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists or by mail. ELY BROTHERS, 56 Warren Street, New York.

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Tea and Coffee Pots that pour by the lid without lifting or tipping. Simple beyond belief. Practical and artistic. Send for pamphlet. THE ASBURY-PAINE MFG. CO., Phila., Pa. This is a good thing—Ed.

ST. JACOBS OIL is the Perfect CURE for **NEURALGIA** WITHOUT RELAPSE, COLLAPSE, MISHAPS or PERHAPS.

The Young Folks.

TWENTY-FOUR PRESIDENTS.

Washington first of the Presidents stands! Next placid John Adams attention commands, Tom Jefferson's third on the glorious score And square Jimmy Madison counts number four.

Fifth on the record is plain James Monroe, And John Quincy Adams is sixth, don't ye know? Next Jackson and Martin Van Buren, true blue, And Harrison, ninth, known as Tippecanoe.

Next Tyler, the first of the Vices to rise, Then Polk and then Taylor, the second who dies, Next Fillmore, a Vice, takes the President's place, And small Franklin Pierce is fourteenth in the race.

Fifteenth is Buchanan, and following him The great name of Lincoln makes all others dim; Next to Johnson comes Grant, with the laurel and bays, And next after Grant then comes Rutherford Hayes.

Next Garfield, then Arthur, then Cleveland the fat, Next Harrison, wearing his granddaddy's hat, Adroit Little Ben twenty-third in the train, And last on the list, behold Cleveland again.

—Exchange.

TO THE "FUNNY FELLOWS."

This world has too much grief and pain,
Too many tears by half;
And so my blessings do I give
To those who make me laugh.

Then let the croakers pass along;
Their talk is but as chaff,
While strength is in the playful words
That stir the lightsome laugh.

True, serious moods must have their place,
For work is life's great staff;
But they toil best who now and then
Send forth the merry laugh.

And so, since shadows form of life
By far the larger half,
Our fervent blessings let us give
To those who make us laugh.

—Demorest's Magazine.

PUTTING UP PRESERVES.

How the Busy Little Ant Stores Away Her Winter Food.

No matter how orderly and systematic the housekeeper, when preserves are to be made, great excitement prevails in the kitchen. There is a scouring of brasskettles, a washing of bowls, and all hands are set to work peeling the fruit, or taking out the stones—if it has stones—with a quill, weighing, and stirring, and skimming the pot, and finally dipping the steaming luscious fruit out tenderly, placing it in the jar, labeling these and carrying them into a dark cupboard.

The tiny, insignificant ant, to whom Solomon referred us to learn wisdom, makes no such ado over her winter stores.

She is very much cleverer than a human being, for she simply walks quietly into the granary, touches the great heaps of seeds and grains, that the diligent workers have put away, with her quivering antennae, and the deed is accomplished. What this queer little creature has done is this: she has put a drop of formic acid, as it is called, upon each of the grains, which arrests the process of germination, and consequently the food in these underground pantries may keep for years without sprouting. It is the same substance which the busy little bee introduces into its honey, dropping a tiny bit of this poison into the honeycomb from the end of its sting.

The famous naturalist Moggridge repeatedly observed that when the ants were prevented from reaching their granaries the seeds began to sprout, and that this also happened when they abandoned their nests. It was inferred that these insects possessed the means of suspending the action without destroying the vitality of the grain and the principle of life hidden in the seed; and now it has been proved that this strange power lies in the formic acid just mentioned. A German scientist went so far as to suggest in 1877 the use of it for preserving fruit for human households.

One naturalist relates that a kind of Indian ant collects large stores of grass and seeds, and after a severe storm brings out the entire stock within the granaries to dry it; for it seems the excessive moisture destroys the preservative power of this acid. Another tribe of ants, which lays up immense quantities of wheat and oats, is so small that eight or ten individuals are required to carry a single grain. They move in separate rows, over rough and smooth ground, up and down steps, often traveling hundreds of yards to place their booty in the common storehouse, where it is preserved according to the means described.

MUST LEARN TO KNEEL.

How the Arab Children Help to Tame the Little Camels.

In Arabia the camel is the "beast of burden." But this useful animal is known by another name as well. Can you tell me what it is? The camel is "the ship of the desert."

Arabia is about one-third the size of the United States, and about one-third of Arabia is covered by deserts.

This broad belt of deserts surrounds the valleys that are a part of the great plateau which occupies the interior of the country. And across these go "the ships of the desert."

These "ships of the desert" carry the goods of merchants from one city to another. There is no water on the



FEEDING TIME.

desert. But the camel has three stomachs instead of one. And before setting out on a journey, one of these stomachs the camel fills with water, so there is no danger of becoming thirsty on the way. There are two kinds of camels, the Bactrian and the dromedary. The Bactrian has two humps on his back, and is a native of Turkey and China. The dromedary has only one hump, and is "the ship of the desert" of which we have been speaking. This camel lives in Arabia.

The Arabian children make much of it. While the little dromedaries are being trained for beasts of burden, they and the children learn to like each other. The first thing the little camel is taught to do is to kneel down. A camel is so tall it must kneel down to be loaded. So when the dromedary is two months old it is made to kneel down for several hours every day. A rug is thrown over it, and heavy weights are placed all along the edge of this covering to prevent it from getting up.

When it is four months old it is put into an inclosure with other animals. The Arab children feed them with camel's milk and water twice a day. After each meal they touch their legs with a little switch. This means: "Kneel down," and the camels mind what the switch says. In a little while they learn to drop on their knees as soon as the stick is lifted.

The camel is easily trained, because it is obedient. And I have heard the patience of the camel talked about when some children were mentioned.—Greta Bryar, in Our Little Ones.

SHE WASN'T SURPRISED.

Not Even When the Beggar Changed Her Twenty-Dollar Bill.

Charity is one of the noblest virtues, but none is so liable to abuse.

A Philadelphia lady, whose warmth of heart is never chilled by the cold logic of facts, had among the pensioners on her bounty a seedy but affable elderly man, who called once a month with the regularity of a rent collector, and always introduced himself by saying:

"You remember me, don't you, lady? I'm the reformed man."

This slightly obscure reference to his past was always accepted as a guarantee of his present merit, with the result that a dime was handed out as an incentive to remain reformed.

One morning he called as usual and made his usual speech.

"I am so sorry," said the good lady, "but I don't think I can give you anything to-day. I have nothing but a twenty-dollar bill."

The reformed man's countenance, which had fallen noticeably at the first half of this speech, brightened up visibly at its close.

"Oh, I can change the bill," he said, cheerfully.

"Can you?" said the lady, just as cheerfully. "Then I'll get it."

She brought the bill and the reformed man counted out the change

from a pocketful of notes and silver, and then went on his way after a fervent "Thank you!"

When evening came and the lady's husband returned home, the incident was related at the tea-table, and the husband, after an amazed stare, lay back in his chair and laughed until the tears stood in his eyes.

"What is the matter?" asked the wife, in wonder. "I don't see anything to laugh at."

And she does not yet perceive anything out of the way in a beggar changing a twenty-dollar bill.—Golden Days.

The Old Lady Stood Firm.

In an Oregon court recently a case came up in which a husband sued to regain possession of real estate which, in a moment of generosity, he had deeded to his wife. The following dialogue took place between the plaintiff's lawyer and the defendant, a lady of Irish birth.

"You admit that your husband requested and even implored you to execute a deed in his favor?"

"Yis, sor, he did, an' shwore at me, too."

"And you refused, point blank, to do so?"

"Yis, sor, I did. I tould him a dade in me hand is wort two in me husband's pocket. But I offered to make a will in favor of him, an' he wouldn't have it. He tould me he'd sue me for a dade."

"And you allowed him to do so?"

"Yis, sor, I did. I says to him: 'John, me darlint, sue away; but ye'll find it's a case where ye'll have to take the will for the dade.'"

Bold Canine Conspiracy.

A dog had been worried by another dog of greater size and strength, and when he returned home it was observed that he abstained from half the proportion of his allotted food, and formed a kind of store of his savings. After some days he went out and brought several dogs of the vicinity back, and feasted them upon his hoard. This singular proceeding attracted the attention of his master, who observed that all the dogs went out together. Following them, he found they proceeded to the outskirts of the town, where the leader singled out a large dog which was immediately assailed by all the guest dogs, and severely punished.

She Did Not Think So.

Nora was in her little night dress. Mrs. Strong, having given her a good-night kiss, reminded her gently, as usual, not to forget her prayer to God that she be made a good little girl.

"Must I ask Him that every night, mamma?" Nora asked, gravely.

"Yes, little one," her mother replied. Nora was thoughtful for a moment. "Mamma," she said, in an injured tone, "is I such a dreffully bad little girl as all that?"—Judge.

A Little Girl's Reason.

"I'm glad I don't own all the dolls in the world," said Mabel; "because, you know, if I couldn't possibly have another."—Harper's Young People.

Whatever may be the cause of blanching, the hair may be restored to its original color by the use of that potent remedy, Hall's Vegetable Sicilian Hair Renewer.

For a thorough business and shorthand course attend the Wichita Commercial college. Y. M. C. A. building.



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Gives instant relief in cases of Scalds, Burns, Wounds, Bruises, Sprains, Aches, Chilblains, Itch, Frostbites, Sore Nipples, Cramps, Rheumatism, Neuralgia, etc. Easily applied.

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We will sell 2,000 of our regular \$10.00 suits at \$4.98, made from Fine Black Wool, Cassimere, heavy weight, nice soft finish, fast color, will wear like iron. Genuine Cassimere, with fancy satin piping, single stitched edge, flaps on all pockets. STYLE very latest, a neat dressy suit, suitable for all seasons, as a business, dress, or all around wear, cost round (like picture) or square cut, as desired. Dead Black, the most staple, popular and stylish color.

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Cut made, and send to us, giving measurement and style, and we will send the suit to you by express C.O.D. subject to examination. Examine it at your express office, and if found perfectly satisfactory pay the agent our special price \$4.98 and Express Charges; otherwise pay nothing. SEND YOUR MEASUREMENTS as follows: FOR COAT, state number of inches around body at chest, measuring over vest by placing a tape or string around body just under the arms, state length of sleeve by measuring outside from shoulder seam to hand, with arm bent; no further measurement necessary for vest. FOR PANTS, measure around body at waist, under vest; also give measurement around body at hips, state length of pants by measuring from crotch to heel.

ANOTHER OFFER!
1,000 \$20.00 SUITS at \$5.00 C.O.D. to examine. NO MONEY IN ADVANCE. Fine Tailor Made, equal to suits made to order at \$25.00 to \$35.00. YOUR CHOICE—Genuine Imported English Heavy Weight (18 ounce) ALL FINE WOOL CLOTH WORSTED, BLACK or BLUE, (fast color) or beautiful dark, Blue, Green, Fawn, etc. Cassimere (worsted finish) INVISIBLE PLAYS; these \$5.00 suits have mohair serge lining, satin piping and faced pockets. These \$5.00 suits are made for fine city trade and are suitable for any one to wear.

SAMPLES OF CLOTH FREE. We will send you samples of all the above, FREE of charge. Send for free catalogue, FREE of charge. Send for free catalogue, FREE of charge. Address: SEARS, ROEBUCK & CO., Cheap Suit House on Earth. 173 & 175 W. ADAMS ST., CHICAGO, ILL.

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Electros must have metal base.
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Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders—

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An English writer asserts that in his country as the price of wheat declines so does the marriage rate.

If you want one of the finest magazines published, send us \$2.25 for *KANSAS FARMER* and *Cosmopolitan*.

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One dollar and sixty-five cents will pay for the *KANSAS FARMER* and the twice-a-week *New York World*. Everybody should read.

We want our readers to secure for us thousands of new subscribers for the *KANSAS FARMER* and we will pay well for such work. If you will get up a list, write this office for liberal terms.

It has been discovered that in England, in 1842, when wheat averaged 51s. 3d. per quarter, the people consumed 440 pounds of the grain per head, while in 1893, with wheat at only 20s. per quarter, they consumed only 363 pounds per head.

Many of our subscribers desire a daily newspaper. In renewing your subscription it is well to note the fact that we can furnish you a year's subscription to *KANSAS FARMER* and daily *Kansas City Star* for \$4. Or, *KANSAS FARMER* and daily *Leavenworth Times* for \$3. The amount for both papers to be sent to this office.

Every farmer in Kansas, and especially the breeders and stock-raisers, should have the greatest live stock journal in the world, the *Breeder's Gazette*, of Chicago, price \$2 a year. We make a special offer of it and the *KANSAS FARMER*, both papers one year, for only \$2. Subscribe now through this office.

Bulletin No. 37 of the Illinois Experiment Station gives the results of experiments with corn in 1895. The reader cannot fail to be impressed with the importance of carefully selecting the variety of corn to plant. As in the Kansas experiments, there is the widest range of yields from the several varieties tested. Thus the "Boone County White" shelled out 107 bushels per acre, which, when thoroughly dried, was still 98.4 bushels.

The current issue of *American Gardening* (New York city), contains a most interesting article by Professor Taft, on the subject of irrigating small farms, gardens, etc. Professor Gallo-way, Chief of Division of Vegetable Pathology, United States Department of Agriculture, contributes a remarkably interesting article (illustrated) on the "Physical Properties of the Soil as a Factor in the Growth of Crops." This is a branch of study which has been neglected.

NINTH BIENNIAL REPORT OF STATE BOARD OF AGRICULTURE.

A volume of 537 pages has just been issued by the Secretary of the State Board of Agriculture. It contains descriptive statements, statistics and general information relating to each county and the geographical and topographical features of the State, together with tables, statements, summaries and diagrams, showing the products, progress and development of the State; reports of the appointed officers of the Board and general agricultural information.

The statistical features of the *Kansas Biennial* have long held the first place for comprehensiveness and reliability. They are not excitingly interesting reading but they constitute a mine of information in convenient form for reference. Their value in all considerations of production and resource is such that they should be in the hands of every farmer who is trying to keep himself informed of the matters pertaining to his calling.

The part of the report devoted to professional and practical papers and discussions of them is particularly valuable. One of these, "The Wellhouse Apple Orchard—Largest in the World," by Phil S. Creager, is alone worth the price of a big book. This paper will be reproduced in the *KANSAS FARMER* in order to give it a wider circulation than is possible with the limited edition of the Biennial.

The introductory by Hon. Thos. M. Potter, President of the Board, is an able production, which reflects the drift of the most progressive agricultural thought of the State. He says:

INTRODUCTORY.

The ninth Biennial Report of the Kansas State Board of Agriculture is herewith presented, but to appear later by some months than it should, owing to a lack of available funds for its earlier printing.

The biennial period to which it relates has been, for Kansas, in common with all her sister States, one of less than usual prosperity. This has been due not alone to the two unfavorable crop seasons which in succession have been common to so many portions of the Union, but also to the general depression existent in nearly all business channels throughout the world. Yet, in spite of so many extraordinarily adverse conditions, Kansas, as a whole, has not failed in the production of tremendous quantities of the great staples, which conduce to comfort and prosperity at home and command gold in the markets of the world.

A State evolved within a third of a century from a wilderness, and which, in the two most unpropitious years of her history, as to both agricultural and financial conditions, produces from her soil the necessities and luxuries of life to the extent of \$238,000,000, has small occasion to feel humiliated, but on the other hand has demonstrated, once and for all, the tremendous resources of her soil and people, even under circumstances the most adverse.

Shortage of crops in various portions of the State the past two years, from lack of seasonable rainfall, has caused the question of irrigation and the extent of the available water supply and its possibilities to be much studied by our people, many of whom have gone actively to work to develop them through individual enterprise, and with results thus far eminently satisfactory and encouraging. The ascertainment and utilization of the underground waters, a judicious catchment, conservation and use of the storm waters heretofore so largely wasted, the deeper, more thorough breaking up of compacted, impervious subsoils, a better understanding of what crops are best adapted to the different sections, along with a more thorough system of agriculture (which are now subjects of profound study), promise an increased and constantly increasing prosperity. Instead of vast ranges, sparse settlements, slipshod ranch farming, wheat kings and cattle barons, this will mean intensive farming—a land of small homes, modest competence and communities contented because comfortable.

The conditions which have prevailed, whatever their effects elsewhere, are to result in a new agriculture and a new prosperity for Kansas, upon which we are now entering. The ways and means of these are suggested in the talismanic words, the magic quartette, "Irrigation," "Subsoiling," "Alfalfa" and "Sorghum."

The first of these has so far progressed as to demonstrate the entire feasibility of assuring crops annually, regardless of seasonable rainfall, by fructifying with the extensive underground water supply (independent of streams) a very considerable percentage of our most fertile lands, in the western two-thirds of the State especially, where retarded rainfall during the growing months has not infrequently made the profits of agriculture quite uncertain. The pumping of these waters will in large measure be inexpensively done, by harnessing to the work the ever-present breezes, which, shot through and through with sunshine, are wafted across our broad prairies and give the ideal healthful climate for all breathing things, and for developing the choicest growths of grain, fruit and flower.

By means of subsoiling, there will be stored in the soil, for use when most needed, much of the usually sufficient rain-

fall now permitted to waste itself and do actual damage as run-off.

The wonderful plant, alfalfa, is proving itself not only one of the most reliably productive, useful and profitable field crops known to our agriculture, but also especially adapted to the soil conditions prevailing in those sections of the State where some of the better-known staple crops are not always reliably productive. A like description applies to the sorghums, and particularly some of the non-saccharine varieties known as Kafir corn, millo maize and Jerusalem corn, which, under even phenomenally adverse conditions, give prodigious yields of superior forage, and wholesome, nutritious grain for that live stock which, under the new environment, must necessarily become highly developed, and will likewise be so much of a factor in our material advancement.

It is the object of the Board of Agriculture to be practically, helpfully useful in the every-day affairs of the people whose servant it is, and to accomplish this it must have their cordial, generous support. If restricted to meager means and equipment, its usefulness to its employers is restricted and made inefficient in a like ratio.

At the annual meeting of the Board in 1894, Hon. Martin Mohler retired, after six years of faithful, arduous work as its Secretary, with the good will and wishes of all its members.

The thanks of the Board are due to Mr. E. W. Longshore, the long-time chief clerk in its office, who has been especially in charge of the very important statistical work—the excellence of which speaks for itself—and to the faithful assistant, Mr. J. C. Mohler; also the various officials, members and correspondents who have so heartily co-operated in giving value to the Board's undertakings.

Those who would secure copies of this valuable book must apply to the Secretary immediately and remit 20 cents for postage.

J. STERLING MORTON.

There is a man in Washington who occupies the chair of Secretary of Agriculture. It has been apparent from the time he took the office that he is a small-sized politician and possesses little of manhood. He has liked to indulge in "smartness" and high and lofty assumptions of superior wisdom and virtue. It is not the custom of the *KANSAS FARMER* to notice the doings of public officials unless they are exceptional. But the recent action of the Secretary of Agriculture is so remarkable and has to do so directly with the interests of farmers that some notice of it seems necessary.

The order of the Secretary excluding Mexican cattle was based on the fact that these cattle are diseased and are likely to infect other cattle with which they come in contact or which occupy pastures or premises where the Mexican cattle have been. The order of exclusion was in the line of good government and the protection of our herds. It was not an unusual order, but to have omitted to make it in view of the threatened invasion of these diseased cattle would have been a gross neglect of plain official duty. The fact that the production of beef cattle in this country has been unprofitable on account of the low prices was not the reason of the order. That fact, however, had its natural and necessary result in the reduction of herds until cattle had advanced to a figure which remunerated the producer. Indeed, the great slaughter-houses were having to bid up sharply to get their supplies. They also advanced the price of beef to the consumer. It is a pretty well understood fact that these great concerns are, under ordinary circumstances, about able to control both the prices at which they buy and the prices at which they sell. They have a "little understanding" among themselves for this purpose. Naturally, they make the margin between what they pay and what they receive pretty broad. They advanced prices to consumers on account of the scarcity and advancing prices of stock. They then became anxious to again buy cheap. How convenient it was for them that the Secretary should just at this juncture open the doors to Mexican cattle, and they thus have a club to beat down the prices to farmers. They probably care nothing for the Secretary's insinuation about a cattle trust, so long as he has even temporarily widened their margin of profit by checking the prices of cattle on foot.

It is not claimed by the Secretary that the Mexican cattle are less diseased than when the order of exclusion was issued. Indeed, the season is now here when the disease is most virulent. The cheap demagoguery of the allusion to

a cattle trust is exceedingly transparent. The Secretary of Agriculture is the official head of the agricultural interests of the United States. This action of Mr. Morton is more in line with the interests of the cattle trust—the packers.

IMPROVING MARKETS.

Prices of staple products of this country made a general advance last week. This advance was but the continuation of movements of the recent past, but it was more marked. The five leading articles—wheat, corn, beef, cotton and petroleum—commodities which supply 40 per cent. of this country's exports, have manifested great strength in the markets, and the advance has been so persistent and so decided as to leave no doubt of the reality of the change. These are all products of industry which have been depressed to that degree which has curtailed their production below what remunerative prices would have called forth.

Four of these products are agricultural, and, as to these, natural causes have conspired with the depression in prices to limit the supply. Thus, in the case of corn the drought of last season greatly diminished the supply. This led to the liberal use of wheat for stock-feeding, thus assisting to reduce the surplus carried over from the unusual crops of a few years ago. This scarcity of feed has also affected the supply of beefs and thereby assisted the advance. But not only have beefs advanced, but stockers as well. The statistics of cattle in the United States amply account for this. There is a real shortage of cattle, which, if the ranges were as abundant as they were a few years ago, would require several years to make up. But the ranges will never regain their former importance in the cattle industry of this country. So far as they can be irrigated they will be wanted for farms, and for this purpose the water of these areas will be appropriated. The cattle business of the future must be conducted on lines similar to those of the older settlements, and the sudden and great increase of cheap cattle cannot again be repeated.

Wheat statistics have long indicated a rise which must have been realized sooner but for the depressed condition of agriculture, which compelled the wheat-grower to market every bushel that could be spared, and that as rapidly as possible, in order to meet his pressing demands for money. This has hastened the crop to market more rapidly than it was consumed and has enabled the "bears"—speculators interested in lowering the prices—to make successful attacks upon the market. When markets are falling speculators nearly all turn "bears," and there are almost none who dare to oppose their tactics. When, as now, the market is rising, the "bulls" are frequently able to bankrupt the "bears" and speculation conspires to hasten the advance of prices. The advances of last week's wheat market are said to have cost the noted "bear," Partridge, \$150,000 in one day to buy off from contracts which he had entered into to sell. This speculator is reputed to have made immense sums by contracting to sell wheat at the current price and then hammering the price lower so that the purchaser would rather pay him the decline than to take the wheat. Now that the actual conditions make further depression of the market impossible, speculators are disposed to buy instead of sell and to so force the market up as to make the seller pay the advance rather than deliver the wheat. Indeed, neither buyer nor seller owns nor expects to own any wheat, although, if he desires, the seller may deliver wheat according to his contract. But the actual wheat markets generally vary with the speculative markets. The present situation differs from that of recent years in that the speculators find their profits in helping to advance rather than depress the price.

The rise in the price of cotton is not so readily accounted for. The crop is enormous and the reserve is large. The advance appears to be purely speculative. It is none the less real.

Stocks of petroleum have been

greatly reduced within the last two or three years. This, together with the fact that the oil monopoly is able to dictate the course of all smaller concerns, is sufficient cause for advance. Possibly some great competitor may see profit in oil and enter the field.

It is a noticeable fact that silver has taken an advance simultaneously with other products.

It is to be hoped that more regular employment for labor will, as it should, accompany the improvement in prices of labor's products. Then, indeed, may better times be expected and, as suggested by a prominent financial authority, the country may be "on the verge of an era of very unusual prosperity."

ADVANCE IN FOOD STUFFS.

A Minneapolis dispatch, dated April 18, says: "The millers here report that the sales of flour to-day have been enormous. The avidity with which offers are picked up at advance quotations proves that stocks of flour everywhere are practically exhausted and that trade begins to believe that possibly the present advance is but the commencement of a very material one. The millers advanced prices all over the country 10 cents to-day. They have also advanced prices in Chicago. Some of the milling concerns here say their sales to-day have been the largest in the history of their business."

A Chicago dispatch of the same date gives a sample of the news which the not distant future must furnish frequently from the wheat pit: "There was a scramble in the wheat pit on the board of trade to-day. The forces at work gave this market an explosive character. At the best price made in the excited market this morning, May wheat was up about 4 cents in three days. Last night the price closed after sharp bulge at 57½ cents seller. The first sales to-day were all from 57½ to 58 cents. The bulls were standing on their heads with delight and the bears were half frightened out of their skins. The little shorts took their punishments the first hour around 58 cents. At this point holders sold a great lot of wheat in grabbing for profits. Elevator people sold wheat heavily. Ream, who carried short line early in the week, sold a fresh short line. The trade watched Ed. Pardridge closely. They count his short line in the millions. That plucky plunger pinched his cigar tighter than ever and stood his ground. Brokers said he covered a lot of wheat for May but sold double as much for July trying to stop the advance. The market lifted during a flurry at midday from 57½ to 58½ in about two minutes. Export clearances in wheat and flour reported from the seaboard was very large at 570,000 bushels. The milling demand over the country has suddenly become urgent. Milwaukee millers were bidding 2 cents over yesterday for wheat. The *Price Current* claims the spring wheat acreage much reduced from last year. Foreign markets were all higher."

Farmers may congratulate themselves that there is no reserve of wild wheat, as of wild cattle in Mexico, which the Secretary of Agriculture can admit for the purpose of checking the recovery of remunerative prices. It is not certain that Mr. Morton will be able to make his "check" on the cattle market work very long. Producers and owners of healthy cattle are not likely to allow State regulations for the exclusion of the fever-infected Mexican cattle to lie unused. In Kansas the Live Stock Sanitary Commission has taken the matter vigorously in hand and at this writing has issued an order quarantining 2,100 head of Mexican cattle at Summit, Butler county. Accompanying that order was also an official announcement of the fact that the M., K. & T. stock yards at Parsons are under quarantine from the fact that the officers of the company and the stock yards permitted Snyder Bros., who owned the above cattle, to unload them in the yards. Cattle from Mexico are excluded from Kansas by law of the State.

It is continually becoming more evident that an era of better prices for products of the farm is approaching. It is doubtless now beginning. The effects of such acts as that of Secretary

Morton can produce no more than temporary delays in realization of profits on the production of food.

Weekly Weather-Crop Bulletin.

Weekly Weather-Crop Bulletin of the Kansas Weather Service, for week ending April 22, 1895—T. B. Jennings, Observer Weather Bureau, Director:

CONDITIONS.

The temperature fell below the normal during the first days of the week and light frosts formed over the State, but the warm days following have carried the temperature above the normal and at the close of the week there is an accumulated excess of about 20°. The rainfall, however, remains deficient, except in Grant, Trego, Ness, Elk and the northeastern counties, though fairly good rains have fallen in the northern counties.

RESULTS.

EASTERN DIVISION.

Farming operations are being vigorously pushed. Corn planting well along in the central counties and has begun in the northern. Corn is coming up as far north as the Kaw river, while in the extreme south farmers have begun cultivating it. The greatest advance, however, is in the fruit trees and grass; the orchards are full of bloom and the prairies are carpeted with green. Wheat and oats are still looking fine, though rain is much needed generally.

Brown.—Ground in splendid condition; a good growing week; corn planting in progress; oats and wheat doing exceedingly well; pastures generally better than usual at this season of year.

Marshall.—Very favorable for growing crops; oats looking fine; wheat pastured during spring in poor condition, that properly put in and not pastured doing nicely; corn planting commenced and there will be a large acreage.

Pottawatomie.—Crops looking well; pastures getting good; corn planting begun and some of it up; gardens fine; fruit prospects flattering; apples a mass of bloom.

Riley.—Corn planting in progress; grass growing nicely; some stock already in pastures; season ten days earlier than last.

Douglas.—Wheat, rye and oats are growing some; grass seems to grow slowly; a large per cent. of the corn now in.

Osage.—A good rain and a light frost; corn planting progressing finely; wheat in good growing condition.

Coffey.—Corn about all planted, some up; flax coming up; grass is growing rapidly except in the central parts; apple trees loaded with bloom, resembling flower beds dotting the prairie; oats generally look well but chinch bugs are appearing in the fields.

Woodson.—Corn planting finished, some coming up; oats fair; flax good stand.

Crawford.—Fine growing weather; corn mostly planted, some up; apple trees full of bloom.

Wilson.—Wheat not looking so well, turning yellow; oats at a stand; prospect for fruit splendid, but we need good soaking rains.

Labette.—Some hail this week; wheat is doing well and very few bugs; corn and oats doing well; prospects for fruits good.

Montgomery.—Small grain suffering for rain; severe hail storm in southeast part of county, doing great damage to crops, gardens and fruit; corn up and some has been plowed once; chinch bugs in many of the wheat fields; stock of all kinds doing well on grass; fruit prospects the best.

Elk.—Corn coming up well, some commencing to cultivate; good prospect for all kinds of fruit.

Chautauque.—Earliest planted corn being cultivated; all other crops in; alfalfa being sown; cattle all on grass getting ready for market; wheat doing well; all fruit has an abundance of bloom.

MIDDLE DIVISION.

The orchards are giving fine promise now; much corn is going in; wheat still improving some; oats doing well, and gardens growing nicely. The sand and dirt storm the first of the week was probably unprecedented. It did some damage by blowing away loose dirt. A good rain is greatly needed.

Saline.—Weather has been generally good for growing crops; some corn coming up; cattle going into pasture.

Phillips.—Wheat better; oats up and in good condition; corn planting in progress; rye good; ground in good condition for planting; good prospect

for fruits; some hail first of week, followed by light frost.

Cloud.—Everything looking fine; light frost on the 18th.

Mitchell.—Crops growing moderately; corn planting progressing; corn up in some fields and stand good; but little wheat will make anything and many of the fields will be put in corn; oats looking well; potatoes up; gardens in fair condition; much Kaffir and Jerusalem corn being planted.

Ottawa.—A good growing week; some hail in northern part of county; apples and cherries in full bloom; rain badly needed.

Dickinson.—Corn planting begun and a much larger acreage than usual will be put in; oats doing well; potatoes coming up; good prospects for an immense fruit crop; wheat not improving.

Marion.—Corn planting progressing finely; fruit damaged to some extent by heavy dry winds.

Harvey.—Corn planting well advanced but not all coming up on account of lack of moisture; wheat and oats suffering from the same cause.

Reno.—Corn mostly planted and much of it up; ground is moist yet; high winds of 14th, 15th and 16th did much damage by drifting soil in fields.

Kiowa.—Terrific sand storm on 15th destroyed nearly every acre of wheat on fall plowing in our neighborhood; barley and oats severely damaged; half the plum blossoms killed; corn growing nicely where lister furrows are not filled with sand; apples blooming.

Sedgwick.—Good weather for planting but too dry for growth; pastures starting well.

Cowley.—High winds first of week finished some wheat on the uplands; drought keeps the corn from coming up; fruit prospect good.

Sumner.—Very dry; rain needed; the dust storm injured wheat and oats; corn planting yet in progress, early planted being cultivated; light frost on 18th.

WESTERN DIVISION.

The severe wind first of the week filled the air with the dry sand and caused considerable damage to growing crops and fruit blossoms. Wheat does not yet give much promise and some fields are being put into other grains. Oats, barley and grass are making good headway, and much stock feed is being put in the shape of Kaffir and Jerusalem corn. Fruit here, as elsewhere, gives abundant promise.

Norton.—Winter wheat badly hurt; spring grain looking very well; corn planting begun.

Decatur.—Fine crop week except the severe dust storm first of week; all crops making satisfactory progress; ground in excellent condition.

Cheyenne.—Wheat looking very good; grass starting nicely; farming generally begun.

Graham.—Grass growing nicely; corn planting has begun slowly, not rushing matters owing to teams—no grain to feed.

Sheridan.—Crops progressing rapidly.

Thomas.—Good growing week; wheat and all small grain doing well; grass coming nicely; some late-cultivated grain fields blown bare first of week.

Trego.—Hail first of week, beating down early gardens, barley, oats, rye and wheat; some wheat fields will be sown to barley.

Wallace.—Small grain on arid land looking well where not blown out; plums, apples and cherries coming out nicely; irrigated crops fine; large crop of onion seed planted, coming up nicely.

Ford.—All crops hurt some by high winds and sand storm; old alfalfa looks fine, some new blown out; prospects very favorable for fruit; prairie grass in first-class shape.

Kearney.—Some slight damage to crops first of week by high winds.

Hamilton.—Severe sand storm first of week; very little damage to crops here, however.

Grant.—Barley and oats growing nicely; wheat not doing much good; pasture improving rapidly; gardens being planted to be irrigated from wells; some hail first of week.

Stanton.—Cattle and horses sheltered during late storm look well, those not sheltered are picking up; fruit injured some by freeze of 17th, not all killed; garden vegetables coming up; most farmers irrigate a small patch from wells; some planting being done.

Clark.—Oats and barley damaged by sand storm first of week; alfalfa unusually forward for the season of year.

We can furnish you KANSAS FARMER and Peterson's Magazine, each one year, for \$1.75. Or KANSAS FARMER and Arthur's Home Magazine for \$1.65. Send to this office amounts above named.

Condition of Winter Grain.

The April report of the Statistician of the Department of Agriculture makes the average condition of winter wheat on the 1st of April 81.4, against 86.7 last year. It was 77.4 in 1893, 81.2 in 1892 and 96.9 for the year 1891. The average for rye is 87.

The averages of wheat for the principal States are: New York, 92; Pennsylvania, 92; Kentucky, 86; Ohio, 86; Michigan, 78; Indiana, 83; Illinois, 87; Missouri, 89; Kansas, 53; Nebraska, 45; California, 94.

Generally the past winter has been hard on wheat. The fall of 1894 was a dry one, and in many States not favorable either to the germination or to the maintenance of the vitality of the plant. The spring has also been droughty over extensive areas. Much good, however, has been produced by the rains in the latter part of March, particularly in the States of Indiana, Illinois, Missouri and Iowa. Moderate rains also fell in Nebraska and South Dakota. It is reported, however, that the soil was so dry and had suffered so long from drought that it will require much heavier rains to produce any permanent effect.

The average date of seeding for the whole country was October 9. Very little damage from the Hessian fly is reported.

Gossip About Stock.

Next week the KANSAS FARMER will publish a sketch and picture of Hon. T. A. Hubbard, the great swine-breeder and President of the Kansas Improved Stock Breeders' Association.

Every fancier of poultry or other improved stock should send to the De Kalb Fence Co., 23 High street, De Kalb, Ill., for a catalogue of their fencing, which is giving gratifying satisfaction to all who have used it. It is durable and cheap.

G. W. Sherman, of Garnett, Kas., writes that he has been in Kansas but a few weeks, yet has already learned to appreciate the KANSAS FARMER. He has a herd of Poland-China swine as well as pure-bred poultry, which he brought from Iowa, and will soon have plenty of young stock for sale.

Col. W. A. Harris, of Linwood, ex-Congressman-at-Large, has returned to his great breeding farm better contented than ever, and strange to say, "none the worse for the wear" because of his experience in Congress. Mr. Harris takes as much pride in breeding as any man in the profession, and deservedly has the reputation of being one of the best Short-horn breeders in the world.

Samuel McCullough, Ottawa, Kas., is one of those quiet and successful breeders of Berkshire swine who would not make a misrepresentation, we believe, for the price of the best Berkshire afoot. He is careful and attentive to business, and while but little noise is made in that quarter, yet some way he always succeeds in disposing of his stock at fair prices and has a class of customers that any one might well be proud of.

DR. ORR'S BOOK.—Readers of the KANSAS FARMER will be pleased to know that arrangements have been made whereby they can obtain this concise and well nigh invaluable "Farmer's Ready Reference or Handbook of Diseases of Horses and Cattle" in combination with this paper at a slight saving in cost.

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Ask your neighbor to subscribe for the KANSAS FARMER.

Horticulture.

Shawnee Horticulturists.

EDITOR KANSAS FARMER:—Shawnee County Horticultural Society will meet in regular session, Saturday afternoon, April 27, at Lincoln Post hall, east Sixth avenue. Subject for discussion: "Pruning, Spraying and General Care of Orchard." Mr. B. F. Van Orsdal will also give some of his experience on his recent Florida trip. All interested in horticulture are invited to attend. F. G. TOMPKINS, Secretary.

Strawberry Leaf-Roller.

Strawberry plants are often injured by insects called the leaf-roller. The pest is present at two seasons of the year. The first brood hatches from the egg early in the season and works upon the plants before fruiting. These worms change into moths which emerge in July and lay eggs from which the second brood hatch in July and August. The worms from this second brood work upon the plants the latter part of the summer and pass the winter in the ground, emerging as moths early in the spring. These lay the eggs from which the first brood hatches. The young worms roll up the leaves of the strawberry and eat out the green portion, leaving it brown and dry.

Wherever the patch is affected they may be picked off by hand and destroyed, provided they are not too abundant. If they are too numerous for this treatment, mow the patch and burn the tops when dry, then when the new growth appears in July and August spray with Paris green and the Bordeaux mixture or dust with some poisonous powder. The plants will then be in excellent condition to pass the winter. This spraying must be attended to as soon as the plants have made a start after mowing and burning.—*Exchange.*

Peaches Which Succeed.

The following excerpts from a letter written by Joseph Little, of Eskridge, to J. F. Cecil, of North Topeka, contains information which, in view of this year's prospect for a peach crop, will interest many:

"I have no secret of success nor theory, only a little experience, which I am willing to impart to others. My orchard is on high ground that is so poor that it would not raise corn at all—rather gravelly and stony, somewhat sandy. I have tried rich slope and bottom land and the trees grow faster there than on upland, but they break down by their own weight and fall in a few years and the peaches generally all rot. Remember, this is my own experience only. Some of my neighbors have trees on low land and they have crops when I have none, i. e., when the frost kills theirs in the spring and does not kill mine, I have a big crop that year; then the next year, being a good peach year, they have a good crop and I have a small one or none. This has happened two or three times.

VARIETIES.

"Brice's Red June, Cole's Early Red, Amsden's June, Alexander. These four are all about alike. Earliest ripe. Free, cling or half cling. If you have one of them you don't need the others. All ripen about same time.

"Hale's Early is same as above but a week or ten days later and rots badly.

"King George is the first free-stone ripe. About a week after Hale's Early. Very choice, fine flavor, much like Large Early York.

"Jaques' Rareripe is a yellow free-stone. Ripe same time as King George, i. e., begin to get ripe as Hale's Early is about gone. Trees and buds tender.

"Crawford's Early is large and salable; yellow free-stone. Follows King George closely. Sometimes rots badly, but no orchard for market is complete without it. Fruit buds tender and easily winter-killed.

"Old Mixon Cling is ripe same time as above. Large and showy; sure bearer; sweetest peach known; tree long-lived and hardy.

"Old Mix Free is very large, fine

flavor, delicious. A person does not know what good peaches are until he has eaten old Mixon Free. Rather a shy bearer but gives big returns when it does bear.

"Stump the World is ripe same as above. Large, good canning peach; good bearer; trees long-lived; free-stone.

"Ward's Late is ripe a few days later than the above; good bearer; not as large as Old Mixon but fruit red and showy; free-stone.

"Crawford's Late is a large late yellow; free-stone; finest peach known. Handsome, high flavor but shy bearer; trees and buds tender (very tender); ripe same as Ward's Late.

"White Imperial is very late; free-stone; very large; fine, spicy flavor; best canning peach known.

"Hill's Chill is a late cling; large, red and showy; good bearer.

"Lemon Cling is a handsome yellow; shy bearer.

"Mammoth Cling is a large yellow; shy bearer.

"There are some other varieties, not worth mentioning, that I have tried, and there are some that I have not tried that are valuable."

Transplanting Evergreens.

EDITOR KANSAS FARMER:—Many people have trouble in transplanting evergreens—a lack of knowledge as to the general wants of the tree. I have seen people a number of times plant them under the shade of large deciduous trees. Death, in such circumstances, is only a question of time. In all cases evergreens should be planted in full sunlight. For several years I have planted them every spring, and have no more trouble in making them grow than any other tree or shrub.

I confine myself to only a few varieties. Red cedar, Austrian and Dwarf Mountain pines, these three will stand all kinds of weather and with me have given good results. The Dwarf Mountain pine is low and bushy, quite easy to move and very little chance for loss if given only fair attention during the growing season. Red cedar, say from four to six feet high, should be sheared until they are compact and of fine form. I like to cut from the top down. It makes them more stocky, with many more chances in favor of living when planted. The tree should be carefully dug, retaining as many of the small roots as possible, never exposing the roots to the drying wind or sun for even five minutes. Have the hole where you wish the tree, in readiness. Set firmly, spreading the roots to their natural position; fill the hole half full with good dirt (not manure), tramp firmly with foot until tree is steady. For a tree the size of above I apply two buckets of water, allowing time enough for the ground to take it up before filling in balance of dirt; then I fill up the hole level with the ground, after which bend the lower limbs on all sides, cover them by making quite a mound around the tree. As the dirt settles the branches become firmly fastened in the ground, making the best possible brace against wind until the new roots begin to form and establish themselves in their new home. During summer the mound of earth can be removed, the lower branches removed and there need be no more trouble. The same treatment will apply to Austrian pine, Norway spruce, etc. Under no circumstances should trees be bought with all the lower branches removed unless the planter wishes to steady with wire and stake. The wind kills more evergreens in Kansas than any other cause. In planting them, if only two feet high, bend some of the lower limbs, cover with dirt and notice results. Cultivate during summer; water only in very dry times. GEO. W. TINCER, Topeka, Kas.

The Maltese blood orange is said to be one of the choicest and most highly-flavored of all the varieties of this fruit. It is of medium size, slightly oval in form, and has a delicate aroma. Its pulp is in some instances as red as the flesh of the beet, but this color varies in different sections. In California it is deeper than in Florida and on the coast, where it sometimes has but a trace of red, while along the Mediter-

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anean it is found the most pronounced. This orange had its origin in Malta, centuries ago.

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David Bradley Mfg. Co.'s Removal From Chicago to Bradley City, Ill.

It will probably be of interest to farmers to learn of the removal of the David Bradley Mfg. Co. from Chicago to Bradley City (formerly North Kankakee), Ill., which is situated about fifty miles south of Chicago. The name "Bradley" has been seen for years and is still to be found on hundreds of thousands of plows, cultivators, rakes and other agricultural implements scattered all over the West and Northwest and in many foreign countries, and has now been "stamped" upon a town a little way south of the great Western metropolis.

Mr. Bradley, who has been a plow-maker for over half a century, left New York State in 1835 to come West and help to erect and start the first foundry built in Chicago, and was the first man to bring pig-iron into that city. The principal business of this foundry was to make cast plows, which were, of course, a step in advance of the then very common wooden mould-board plow. After a while (in 1854) a small plow factory was started by him, on Canal street, which was later removed to West Randolph street. This rapidly increased its output until larger quarters were needed, whereupon, in 1860, a factory site was purchased on North Jefferson street, buildings erected and additional space acquired from time to time, until the establishment reached its present magnitude. Early in the foregoing history Mr. Bradley associated with himself Mr. Conrad Furst, under the firm name of Furst & Bradley, which was incorporated later as the Furst & Bradley Mfg. Co. Mr. Furst's interest was subsequently purchased by the Bradleys and the style of the corporation changed to David Bradley Mfg. Co., which it still retains. This company has branch houses at Minneapolis, Minn., Council Bluffs, Ia., and Kansas City, Mo., with general agencies at various points throughout the country, extending to the Pacific coast.

The removal to Bradley City was decided upon, partly because of inability to secure any further enlargement of quarters at present location, also because the property, which is in the very heart of Chicago, is really too valuable to occupy as a factory, lumber yards, etc., and finally because it was found that the shipping facilities of Bradley City are quite equal to Chicago, inasmuch as direct communication with every railroad entering Chicago can be had over either the Illinois Central or Indiana, Illinois & Iowa railroads, one or both of which intersect or connect with them all; therefore all fuel and stock can be unloaded from, and all manufactured implements loaded into, cars which run directly into their warehouses and shops at Bradley City. Plenty of ground there permits of any prospective enlargement which may be needed in the future.

We understand that this change in location will in no way change the proprietorship or management, which is as follows: David Bradley, President; J. Harley Bradley, Vice President and Treasurer, and George H. Francis, Secretary. We are also told that its policy, as heretofore, will continue to be the production of the best implements that can be made and which will embrace all the latest ideas that are compatible with good results, including, of course, the celebrated "Garden City Clipper" plows, which are so well known.

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In the Dairy.

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The Problem of Dairying.

The action of the Kansas Legislature in not providing any law for the protection of dairymen makes the future of this industry very uncertain for the next few years. The situation is a serious one and should be viewed by every farmer who keeps a cow or makes a pound of butter for the market, as an inexcusable neglect on the part of certain representatives who turned a deaf ear to their dairy constituents, honestly entitled to as much consideration as any other class. Briefly stated, the conditions surrounding dairymen are as follows: With good cows and the best of appliances the average cost of butter is 12 cents a pound, summer and winter. The fats that are used in the manufacture of oleo cost from 3 to 6 cents a pound, enabling the packers to sell the finished imitation article at 9 cents a pound wholesale for the low grades, which retail in the market at 12½ and 15 cents. In an interview with the Armour Company recently, they stated that the inferior grades of oleo are composed entirely of fats, no butter whatever enters into the make-up; a small per cent. is used in the higher grades, just enough to give it a faint taste of the genuine article.

The question that confronts dairymen is, can they continue business against such odds? In plain arithmetic it amounts to this: the lower grades of oleo can be put on the market at 25 per cent. less than the first cost of butter. Never in the history of the State, during the winter time, has butter reached so low a figure as has been recorded during the last six months, and many of the creamery patrons and private dairymen are very much discouraged at the outlook. When the packing-house combine is able to manipulate the Legislature in their favor, as was done at the last session, dairymen stand a poor show of getting any laws that will help their business. One year ago Iowa enacted a law prohibiting manufacturers from coloring their product yellow, and in consequence oleo finds very little sale in that State. During the last session of the Nebraska Legislature a similar law was passed, and later information has been received that Alabama, Wisconsin and Missouri have all passed anti-oleo laws. Before the next Kansas Legislature meets let the people say whether the packing-houses should be favored to the detriment thousands of dairymen who work early and late, and are being robbed by these corporations we have helped to enrich. The editor of this department wishes to say to his fellow workers in this State, get in touch and be ready for active work during the present year, as a special session is liable to be called in 1896, when we can profit by whatever mistakes were made last winter. The names of all the members of the last House and Senate who were against us have been secured and will be made known whenever the time is ripe.

That Pennsylvania Butterine.

The evidence in the hands of the committee on awards of the butter exhibit at the recent meeting of the Pennsylvania State Dairymen's Association as to the genuineness of the sample, accuracy of analysis and correctness of the conclusion that the alleged packages of butterine were undoubtedly butter, is indisputable. In rebuttal of the statement, supported by affidavit from Armour & Co., of Chicago, and A. J. Palm, of Meadville, to the effect that the material awarded second and third prizes was butterine sent by the former to the latter and surreptitiously entered in competition with butter, the committee have on file a letter from Mr. Palm stating that he furnished to George H. St. John, the Secretary of the association, a correct sample of the material in question. Also, an affidavit from Mr. St. John that he personally sealed and shipped by express to State college the same sample. Further, an affidavit from Dr. William Frear, chemist of the State Board of Agriculture and Exper-

iment Station, that he received and opened the package and personally superintended a careful chemical analysis, with results already published in the press showing that it was undoubtedly butter. There remains no doubt concerning the history of the sample from the time it left Mr. Palm's hands until the analysis was complete. The analysis having been conducted by State authorities who were disinterested parties and in entire ignorance of the history of the sample, leaves no room for argument or question as to the validity of the results.

A One Cow Report.

In 1893, Mrs. Fairchild, of Rolling Prairie, Wis., was the owner of a half Jersey grade cow. The cow supplied the family of three with milk, cream and butter. The surplus was sold. The net receipts from the sales made from the cow, including the calf, milk and butter for one year, were a trifle over \$80. The calf brought \$5. The milk sold at 5 cents a quart, and the butter at from 20 to 25 cents per pound. The cow, when in full milk, would make over and above the milk and cream used by the family, eight and one half to nine pounds of butter a week.

New Jersey and Washington in Line.

The New York *World* records the successful passage in the New Jersey Legislature of a law similar to the Massachusetts statute forbidding the coloring of oleomargarine in imitation of butter. The law also provides a penalty of six months imprisonment and a fine of \$200 for selling oleomargarine for butter. The act takes effect immediately. There seems to be considerable hand-writing on the walls about these days.

The State of Washington has passed an anti-oleomargarine law and so joins the procession. Some of the half-hearted dairymen who used to say: "You can't do anything to stop this fraud," are invited to chirk up and take on new courage. There is nothing like keeping up an everlasting pounding when you are fighting a fraud.

Forage Crops for Dairy Cows.

Good pasture grass re-enforced by a light feed of bran and corn meal makes a ration balanced just right for a milk-producing food. It is also palatable and easily digested—qualities that are indispensable. But we have good pasture only a small part of the year. Grass grows well in May and June, then comes the heat and drought of mid-summer, with its short pasture; or, if the number of stock is small in proportion to the size of the pasture, with, at best, its tough and dried up grass, which is rendered deficient in nutriment and the sustaining elements of which cows stand in need during the heated term. In the latter part of summer or in the fall, we may have another term of good pasture if we are favored with timely rains. In case our calculations are spoiled by the absence of moisture to produce grass when most needed, some soiling crop, such as green rye, green oats, sometimes millet, green corn fodder, beginning with some early variety and ending with some late sort, and Kaffir corn to finish with, which holds green until late in September. The forage crops come along in the order named, and any that is not needed for feed at the time can be cured and stored away for winter use.

I doubt its being a good policy to pasture much if the whole farm is good tillable land, worth from \$50 to \$100 an acre. If one has rough or low land that is not well adapted to cultivation, of course we can have it in permanent pasture, but we can not expect to carry cows all through summer on grass alone. It is certain, if we expect to get the best results and most profit out of the dairy business, the pasture must be supplemented for at least part of the summer with other food. On our own farm cows run on pasture most of the summer, but are fed at the barn night and morning during the dry, hot weather, with whatever green stuff is in season, also the grain ration, which we are sure is a paying investment when making butter.

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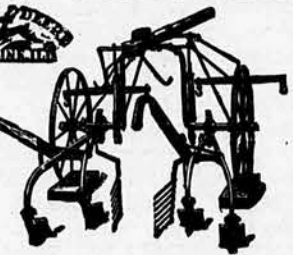
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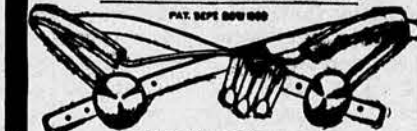


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Are Doctors Honest?

Lying before me is a letter from a stranger, charging nearly everybody in this city, and especially the medical profession, with being dishonest. He specifies several instances in which he claims to have been defrauded in his dealings with people in the capital city. I have no defense to offer for people whose conduct I know little or nothing about, but when it comes to making wholesale charges against the honesty and probity of the medical profession, I am warranted in coming to its defense. I make the bold assertion that there is no more honest and upright class of men on the face of the earth than medical men, and considering what and who they have to do with the only wonder is that any of them are honest. There is no class of men on earth so often and so shamefully cheated out of their hard-earned wages as the medical profession. Any other man if cheated and plundered day after day and night after night, on Sundays and holidays, year in and year out, would be very likely to adopt the language of old Shylock and cry out to his oppressors:

"The villainy you teach me I will follow, And it shall go hard with me, but I will better the instruction!"

The nature of his calling makes it necessary for the physician to trust practically all who come to him for help—the Lord's poor and the Devil's poor, as well as other folks. If any man comes and says: "Doctor, my wife is dangerously ill and she must have help at once or die," public sentiment, which is stronger than statutes, compels the doctor to go to that wife. If the man says: "My child has been run over in the street and is almost killed! Hurry, doctor, and see if you can save it," no doctor stops to inquire about his pay. He does not ask how much he is to expect for his services nor when he will receive it, nor whether the man is financially good or worthless, whether he pays his debts or cheats his creditors, but he sees a life at stake and goes.

Nobody has any legal right to demand or command his services, and he has a legal right to say: "I will not go unless I am sure of a good fee." But the unwritten law, called public sentiment, is more urgent than a whip of scorpions. But recently a Minnesota doctor made such a refusal, in a case where he knew to a moral certainty that he would not be paid, for the man who wanted him was one of the Devil's poor—a man who could, but would, not pay his debts, and that event was telegraphed all over the country and the doctor was reprobated and denounced from one end of the land to the other, simply for refusing to work where he knew he would not get his pay when it was done. The public thinks itself just to all men, but it is not just to the doctor in that matter. If it would pilory and post all over the land the people who could but will not pay their doctors, and make them the subjects of the same strong maledictions they heap on the doctor who declines to serve without pay, then the public might claim to be impartial. But it does nothing of the kind. It laughs and jokes over the doctor's discomfiture, takes a note of the occurrence and then all too often goes off and repeats the swindle on the first doctor it employs. If the public educated its doctors at public expense, as it does its teachers, it might have some right to demand otherwise unrequited service. But the doctor must pay for his own education; he must furnish his own office and library and laboratory and conveyance, and even the drugs and dressings often which he uses in the case, for which he must pay cash or be denounced as a dead beat. How many merchants or mechanics would remain honest and faithful to humanity if it treated them in the same way? Would they not be filled with malevolence and hate and bitterness? Would they not

say, as did Mr. Vanderbilt: "The public be damned! I don't owe the public anything!"

I know, in a single instance, where an old, gray-headed physician has labored night and day in this State for fifteen or sixteen years, who has saved many lives and many limbs, and has \$25,000 of fair current charges on his books that he will never be able to collect. A co-worker of his recently died, after many years of hard work, who was supposed to be well off, and when his family undertook to collect the money represented in a mountain of charges found in his books, they could not collect enough to pay the funeral expenses. Men whose lives and the lives of whose families he had saved, repudiated his bills and beat the family out of them, who would never have dared to question the correctness of his charges in his lifetime. Instead of dying a well-to-do physician, as all supposed, he died a pauper, with enough honestly-earned accounts to have made his family comfortable for years. There are men in all walks of life, even in the pulpit, who never ask the doctor for his bill for services rendered and who pretend to be insulted if he asks them to settle.

But, let the reader remember that this just indictment is not drawn against the whole public nor all of mankind. There are many noble exceptions to this all too common practice of humanity. Once in a while it happens that a man, knowing that he is to have a new-comer in the household, thoughtfully lays up a few dollars for the doctor and pays him when his services are rendered. One would think that with three-quarters of a year's notice that about a given date a physician would be needed in the family, the same thoughtful provision would be made for defraying the doctor bill as for arraying the new arrival. But such thoughtfulness is about as rare as angels' visits.

I know a man who, by all the known laws of life and death, a few years ago was within four and a half or five minutes of the grave, with his carotid artery shot off and the life-blood pouring out of him by the gallon, who was saved by the prompt and skillful aid of a surgeon. And yet that conscienceless ingrate, who has had employment and good wages for years, never has paid a cent for the saving of his life. He and his wife dress and live better than the doctor and his wife can. How faithful to his high mission, think you, a doctor ought to be in such a case? Could you blame him much if he should become tainted with the virus of dishonesty that, like a deadly miasm, confronts him at almost every breath he takes?

The merchant can say: "I paid cash for these goods and I must have cash when I let them go." The lawyer can say: "I must have a retainer before I take the case." The banker can say: "I must have security before making the loan." The laborer can invoke the mechanic's lien law to secure his earnings, while it is demanded of the doctor that he go immediately and render the highest possible grade of service to whoever calls him, and then accept what ingratitude may choose to offer him or go without anything, according to the caprice of the employer. The law protects the hired girl, the day laborer and the contractor, and sees to it that they are paid, if it takes the coat off their employer's back.

Notwithstanding all these adverse conditions, there is no more honest, conscientious, faithful class of men on the planet than the doctors. To stand guard at the gateways of life and beat back from day to day the most artful and relentless foe ever confronted by mortal man, has so much of nobility and exaltation of character in it that few men in the profession will ever be found wilfully and knowingly dishonest. No set of men have a higher sense of duty and solemn obligation, and ignorance constantly assails them for being honest enough to differ with it as to what is best, and then cheats them when they are done serving.

KANSAS FARMER and Semi-Weekly World (N. Y.), you can have for \$1.65 one year.

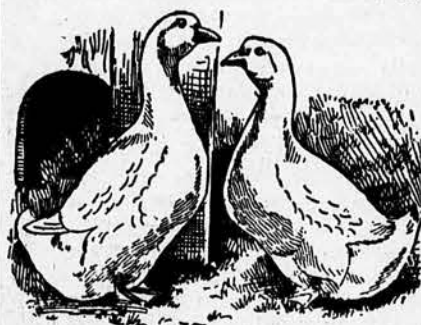
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The Poultry Yard

The Peking Duck.

Of the four leading varieties of ducks the Pekings are decidedly the most popular in this country. They were brought here from China about twenty years ago and soon displaced the Aylesbury and Rouen, the English and French breeds, in public estimation. The fourth variety, the Cayuga, has the disadvantage of coal-black plumage. It also requires the vicinity of lakes, ponds or streams, as it is decidedly a water duck.

The Peking breed matures earlier than the other varieties. The birds are said to be larger at six weeks old than any other breed, which makes them valuable for market at this age. They are hardy, easy to raise, fine for the table and good layers of large white eggs. They grow rapidly, and do well when there is no water. They are not as tractable as the Rouen or Aylesbury, hence a cross with them is often preferred. A flock of common ducks can



PRIZE PEKING DUCK AND DRAKE.

be greatly improved by using a Peking drake. Their white, elastic feathers, largely mixed with down, are almost as plentiful as those of the goose, and form an important source of revenue when the birds are raised in large numbers.

Duck culture is a business that is rapidly extending, especially on Long Island, where the duck farms are growing in size and numbers. The circumstance that the Peking is the favorite breed among all the large duck farmers, being used either pure or crossed with others, proves conclusively their belief in its superior merits.—N. Y. World.

Natural Incubation.

If you wish to use hens to do the incubating it is a good plan to have a room separate from the main house with not too much light. Make an effort to set as many hens at a time as possible. It will require but little more time and care to look after six hens than it will one. Two or three days is none too long for the hen to sit on china or nest eggs before giving the ones you wish her to hatch. She will have become accustomed to the place, will have shaped the nest to her notion, and will have it nice and warm. Give each hen as many eggs as she can conveniently cover. Watch them carefully for two or three days to see that there are no eggs left to get cold. During the first 48 hours the hen should sit perfectly quiet, says a poultryman, as it takes just that time to start the embryo chick on its life voyage. We notice the hen seldom leaves the nest or turns the egg during this time. After they have sat quietly for four or five days, prepare yourself with more fresh eggs, and go in the evening with a good light and tester and test each egg. A little practice will soon enable you to pick out the infertile ones. When you have completed your work, give each hen the number you wish her to cover. Fair sized hens should have 11, never more than 15. On the average, hens will hatch more vigorous chicks from 11 eggs than any higher number.

We might go on through the 21 days and describe the eggs as we have broken them and seen the spider-like little animal, and noticed the pulsation of the heart, etc., but we will leave this for the incubator people. Finally on the 20th day the imprisoned chick has drawn its last nutrition from the egg, its vital heat and circulating blood have absorbed every particle of the substance of the egg, and there remains only the vigorous little animal anxious to get out. Its prison cell is punctured by thousands of pores that always break first at the bigger end of the egg, because it is al-

Your money

back if you want it—Vacuum Leather Oil. Get a can at a harness- or shoe-store, 25c a half-pint to \$1.25 a gallon; book "How to Take Care of Leather," and swob, both free; use enough to find out; if you don't like it, take the can back and get the whole of your money.

Sold only in cans, to make sure of fair dealing everywhere—handy cans. Best oil for farm machinery also. If you can't find it, write to

VACUUM OIL COMPANY, Rochester, N. Y.

ways less moist and more brittle at that end. There, too, the head of the little chick is turned for air, and the beak breaks through the rotten wall, finds more fresh air, presses hard in that direction, and soon breaks away from all feeble resistance, and thus ends the period of its incubation.—

Rearing Turkeys.

It is best to confine the brood for a week at least after hatching. Should the mother hen then become restless, she may be let out during the middle of the day. As the turkey retires early and dislikes being disturbed after settling down for the night, be sure and coop them before the sun sets. The young turkeys will eat but little the first week. Feed separate from the mother, for she will devour all the food within reach. For downright greediness, an old turkey hen has few equals. Dry bread soaked in sweet milk is one of the best foods for the young, as is curd from fresh butter-milk. A whole flock has been raised on warm curd. A custard made of one egg to a pint of milk, thickened with bread (no sugar), is a good food. When about two months old, feed whole wheat part of the time and mix corn meal with their feed; this should not be fed exclusively. Allow plenty of liberty, as confinement will kill young turkeys. When the mother hen begins tramping wildly from one side of the coop to the other, better let her out unless the weather is unfavorable.

When about the size of partridges and old enough to follow the mother in long rambles, the young will need but little attention, simply a little feed morning and evening. They much prefer bugs, grasshoppers, insects and seeds to a more civilized ration. Do not neglect to bring them home at night and put under shelter until old enough to fly into trees and care for themselves. Turkeys do not always select wisely the best resting place for the night, hence vermin sometimes attack and annoy them. Teach them to come at the sound of your voice; it will save many a weary tramp in searching woods and fields.

Six weeks' time is sufficient to fatten for market. Feed twice a day all the whole corn they will eat, but do not attempt confinement, as a turkey chafes under restraint and will lose flesh rather than fatten. They will not take more exercise than is necessary to keep in good health.

Write for information of the

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The Home of the Peach and other Delicious Fruits. The land of perpetual sunshine, where there are neither blizzards, cyclones, nor malaria; where the fruit crop never fails, and the farmers are prosperous and happy.

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We have Branch Houses well located. Mention this paper.

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.

LUMP ON MARE.—My mare has a hard lump on her left side near the fore leg. It is not very sore but seems to hurt her when she walks. It has been there over a month. What shall I do with it? J. V. P.

Answer.—The lump is the result of an injury, probably the fracture of a rib, and had better be left alone unless you can detect pus and then it should be opened carefully.

LAME MARE.—My neighbor has a mare that I think is stifled. She carries it lame and only rests the toe very slightly on the ground. It is swollen some. D. McC.

Hays City, Kas.

Answer.—The term "stifled," as used by horsemen, refers to the dislocation of the patella and in that condition the leg becomes rigid and remains so until the patella is returned to its place. A sharp blister should then be applied to the inside of the joint. Your mare is lame in some other joint and it must be located before treatment can be given.

SOW AILING.—I have a sow that will follow me and squeal when I feed the others but she will not eat anything except a little ground oats and corn once in two or three days. About four weeks ago she had a boil on the lower part of her ham which I opened and let out a lot of pus. She likes buttermilk. How can I make a good home-made condition powder for hogs and horses? Hardilee, Kas. E. C. W.

Answer.—Examine your sow to see if there is not some sore about her jaws or in her mouth that interferes with her eating. If so the remedy will be to give her soft feed until the sore gets well. Dr. D. E. Salmon's prescription for hogs is the best we know of. Horses do not need condition powders unless they are sick and then they require special treatment according to the symptoms. Wholesome food is the best tonic a horse can eat. There is no medicine or combination of medicines that constitute an "all-round" cure.

CAKED UDDER.—Caked udder was what I wished to call your attention to and not the decrease of milk. During the cold weather one teat after another began to cake till all were larger and harder than they should be. Eureka, Kas. J. F. W.

Answer.—Give one pound of Epsom salt dissolved in half a gallon of warm water; then give one ounce of nitrate of potash twice a day for a week. Bathe the udder twice a day with hot water, wipe dry and apply a little of the following, rubbing it in well with the hand: Gum camphor rubbed fine, 2 ounces; fluid extract of lobelia, 2 ounces; olive oil, 6 ounces; mix. Milk thoroughly clean several times a day. The cow should be sheltered and not allowed to lie out on the cold, damp ground at night. Some cows, from some unknown cause, are predisposed to garget and have frequent attacks without any apparent exciting cause.

The world has had its "stone age," its "dark age" and its "iron age;" it is now in its "steel age" and its "bond age," and there are some inhabitants who hope the latter ages will never end.

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 Blanches 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.

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Stop Naturally!

Don't tobacco spit and smoke your life away, and go on suffering from nerve troubles that make the strongest man weak, dizzy and undecided, prevent him from doing the right thing at the right time, all because the blood is tobacco-poisoned. The natural way to stop a thing is to get a distaste for it. You can stop naturally this brain-weakening, nerve-ruining, tobacco disease by the use of the original, time tested, guaranteed tobacco habit cure.

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OUR GUARANTEE IS PLAIN AND TO THE POINT. One box, \$1; three boxes, thirty days' treatment, \$2.50. Sold by druggists everywhere under a GUARANTEE TO CURE THE TOBACCO HABIT in any form, or money refunded. We don't claim to cure everyone, but the percentage is so large, we can better afford to have the good will of an occasional failure, than his money. **WE HAVE FAITH IN NO-TO-BAC.**

Book called "Don't Tobacco Spit and Smoke Your Life Away," mailed free. Beware of imitations, there is no substitute for NO-TO-BAC. STERLING REMEDY CO., Chicago office, 45 Randolph St.; N. Y. office, 10 Spruce St.; Canada office, 374 St. Paul St., Montreal; Laboratory, Indiana Mineral Springs, Ind.

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Publishers' Paragraphs.

FARM RECORD.—Our "Farm Records" have been such a splendid seller because of their practical value that our supply is now quite limited. We have a number of the best binding only, which the KANSAS FARMER will deliver to any address for only one dollar.

The Kansas Weekly Capital publishes more Kansas news than any other weekly paper. A free sample copy will be sent on application to THE TOPEKA CAPITAL CO., Topeka, Kas. Or send \$1.50 to this office for KANSAS FARMER one year and also Capital twice a week.

Speaking of sewing machines, there is nothing better made than the "Kansas Farmer" machine, which is not only modern and substantial but has all the latest improvements, and the price is within the reach of every reader of this paper. Look up our great offer and remember that we guarantee satisfaction.

THE UNTERRIFIED.—The Topeka Advocate still champions the cause of the 118,000 unterrified Populists of Kansas and their brothers in other States, yet it talks politics in such an unprejudiced way that it is read by many Republicans, Democrats and Prohibitionists. You can get it for \$1 a year, 25 cents for three months. The Advocate and KANSAS FARMER a year for \$1.50.

We should advise all fruit-growers to send to Wm. Stahl, manufacturer of Excelsior Spraying Outfits, Quincy, Ill., and get his catalogue of spraying outfits and four books devoted to spraying all varieties of fruit and vegetable crops. These books give full information for destroying insects and preventing disease, and in fact, a full and complete treatise on this important subject, their use insuring a large crop of fine fruit. Mr. Stahl makes no charge for the books.

A new thing in our incubator columns is the advertisement of a \$10 incubator with a brooder to match for \$10. It is made by the Kansas City Incubator Co., of Kansas City, Mo., and they claim they have the heat, ventilation and moisture apparatuses in the very most complete form, and fully illustrate this fact in their catalogue, which is sent free. This incubator being so cheap, we see no reason why all of our readers should not have an incubator and brooder. Drop a card to them for their catalogue if you are interested, first reading their advertisement.

QUICK WORK.—On February 27th the office and entire plant of the Folding Sawing Machine Company, of Chicago, was destroyed in the great fire on the West Side, which involved a total loss to manufacturing interests of \$750,000. Notwithstanding the fact that it was necessary for above-mentioned company to have malleable castings made, which usually takes about four weeks, this company, with commendable enterprise, shaped matters so they were able to fill orders just twenty-one days from the date of the fire. This was certainly quick work, and the gentle-

men connected with this company deserve a great deal of credit for their energy and push. Their new address is Folding Sawing Machine Company, 64 and 66 South Clinton street, Chicago.

We have recently sent out a good many "Handy Cobbler" outfits, and shall be pleased to hear from those who have received them as to how they are pleased. If satisfactory it is a pleasure to know it, and if not satisfactory we want to be informed of the facts in detail.

Any of our subscribers who are about to renew subscription will find something interesting by reading the advertisement of "Samantha at Saratoga." If you have already renewed your subscription it will tell you how to get the book at the reduced rate.

MARKET REPORTS.

Kansas City Live Stock.

KANSAS CITY, April 22.—Cattle—Receipts since Saturday, 2,931; calves, 27; shipped Saturday, 1,706 cattle, no calves. The market opened strong to 10c higher on export and steady on light dressed beef steers, and closed slow, and in some cases lower. The following are representative sales:

DRESSED BEEF AND SHIPPING STEERS.		
19.....1,543 \$5.00	85.....1,393 \$5.55	
39.....1,401 5.55	93.....1,259 5.40	
20.....1,231 5.15	11.....1,275 5.15	
18.....1,380 5.01	44.....1,199 5.00	
15.....1,142 4.90	40.....1,154 4.91	
4.....1,093 4.50	2.....1,420 4.50	
20.....955 4.45	14.....1,045 4.30	
3.....913 4.25	8.....953 4.10	

TEXAS AND INDIAN STEERS.		
91 cmf.....1,091 \$4.35	12 cmf.....1,133 \$4.35	
36 cmf.....1,074 4.35	22 cmf.....1,100 4.15	
14 cmf.....1,024 3.80	22 cmf.....926 3.75	
45 cmf.....1,026 3.75	1.....1,200 2.50	

WYOMING STEERS.		
8.....1,262 \$2.15	2.....1,220 \$1.75	

TEXAS AND INDIAN COWS.

25 heif.....	856 \$3.75	
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COWS AND HEIFERS.

1.....1,100 \$4.05	1.....1,280 \$1.03
20.....955 3.85	13.....867 3.80
1.....1,040 3.40	10.....846 3.40
1.....1,000 3.50	2.....1,025 3.50
1.....980 3.25	2.....560 3.00
2.....1,020 2.75	2.....1,120 2.75
1.....1,130 2.65	18.....515 2.65
4.....1,092 2.50	16.....1,055 2.50
1.....870 2.40	1.....810 2.40
3.....980 1.85	1.....930 1.75

STOCKERS AND FEEDERS.

17.....548 \$3.75	18.....749 \$3.75
1.....760 3.25	1.....390 3.10

Hogs—Receipts since Saturday, 3,916; shipped Saturday, 355. The market was weak to 5c lower. The following are representative sales:

18.....273 \$4.85	78.....237 \$4.80	58.....257 \$4.80
23.....282 4.80	69.....257 4.80	70.....257 4.75
20.....229 4.75	51.....244 4.75	81.....217 4.75
36.....274 4.75	83.....234 4.75	77.....216 4.72 1/2
35.....212 4.72 1/2	75.....230 4.72 1/2	6.....225 4.72 1/2
80.....207 4.70	82.....230 4.70	71.....219 4.70
58.....220 4.70	65.....220 4.70	37.....253 4.70
70.....221 4.70	16.....235 4.70	53.....207 4.70
55.....165 4.70	49.....215 4.67 1/2	63.....217 4.67 1/2
76.....174 4.65	99.....213 4.65	71.....168 4.61
66.....227 4.65	74.....205 4.62 1/2	82.....181 4.62 1/2
70.....189 4.62 1/2	86.....168 4.62 1/2	150.....122 4.62 1/2
51.....162 4.60	90.....176 4.60	19.....149 4.61
22.....270 4.60	63.....171 4.60	93.....175 4.57 1/2
75.....180 4.55	32.....153 4.50	33.....143 4.50
13.....121 4.40	103.....123 4.40	22.....131 4.40
12.....140 4.40	35.....122 4.35	28.....113 4.30
23.....111 4.30	26.....107 4.30	23.....122 4.30

Sheep—Receipts since Saturday, 5,502; ship-

ped Saturday, 3,196. The market was slow but steady. The following are representative sales:

33 lambs.....	71 \$4.50	30 lambs.....	77 \$4.00
212 Col.....	93 3.90	96.....	102 3.90

Horses—Receipts since Saturday, none; shipped Saturday, 9. There was little done at the horse and mule barns to-day in the way of sales. A good many traders are looking around preparatory to the opening of the auction sales to-morrow. The managers expect a good strong market this week for the best grade of horses.

St. Louis Live Stock.

ST. LOUIS, April 22.—Cattle—Receipts, 3,400; shipments, 350; market unsettled; natives, light supply and poor in quality: good to choice steers worth \$5.00@5.50; fair to medium, \$4.25@4.75; light, \$3.50@4.10; feeders, \$3.00@4.00; Texans in good supply and generally sold lower; fed steers, \$3.50@4.60; grassers, \$2.60@3.50; cows, \$2.00@3.00. Hogs—Receipts, 2,300; shipments, 1,900; notwithstanding a light supply prices declined 5c; tops sold at \$4.85; mixed, \$4.60@4.80; light, \$4.40@4.75. Sheep—Receipts, 5,700; shipments, 100; most of the receipts went direct to slaughterers; market slow; native mixed of 90 pounds, \$3.85; native clipped, \$3.10; fed westerns, \$4.35; spring lambs, \$6.00.

Chicago Live Stock.

CHICAGO, April 22.—Hogs—Receipts, 25,000; official Saturday, 8,588; shipments Saturday, 565; average weight for the past week, 227 pounds; average weight for the previous week, 225 pounds; left over, about 2,300; quality only fair, market opened active and steady, later ruled quiet with prices 5c lower. Sales ranged at \$4.60@4.95 for light; \$4.55@4.75 for rough packing; \$4.60@5.00 for mixed; \$4.80@5.10 for heavy packing and shipping lots; pigs, \$3.50@4.65.

Cattle—Receipts, 8,000; official Saturday, 432; shipments Saturday, 523; market steady. Sheep—Receipts, 16,000; official Saturday, 5,417; shipments, 4,037; market weak.

Chicago Grain and Provisions.

	April 22	Opened	High'st	Low'st	Closing
Wht—April....	61 1/4	61 1/4	61 1/4	61 1/4	61 1/4
May.....	61 1/4	62 1/4	62 1/4	60 3/4	61 1/4
July.....	62 1/4	63 1/4	63 1/4	61 1/4	62 1/4
Corn—April....	48	48	48	48	48
May.....	48 1/2	49	47 1/2	48 1/2	48 1/2
July.....	48 1/2	49 1/2	47 1/2	48 1/2	48 1/2
Oats—April....	28 1/2	28 1/2	28 1/2	28 1/2	28 1/2
May.....	28 1/2	29 1/2	28 1/2	28 1/2	29
July.....	29 1/2	29 1/2	28 1/2	28 1/2	28 1/2
Pork—April....	12 3/4	12 3/4	12 3/4	12 3/4	12 3/4
May.....	12 45	12 47 1/2	12 27 1/2	12 37 1/2	12 37 1/2
July.....	12 70	12 70	12 52 1/2	12 65	12 65
Lard—April....	6 95	6 95	6 95	6 95	6 95
May.....	6 97 1/2	7 00	6 95	6 97 1/2	6 97 1/2
July.....	7 07 1/2	7 15	7 07 1/2	7 12 1/2	7 12 1/2
Ribs—April....	6 37 1/2	6 37 1/2	6 37 1/2	6 37 1/2	6 37 1/2
May.....	6 37 1/2	6 37 1/2	6 32 1/2	6 37 1/2	6 37 1/2
July.....	6 50	6 50	6 45	6 50	6 50

Kansas City Grain.

KANSAS CITY, April 22.—The train of wheat from Everest, Kan., which arrived Saturday, was included in to-day's receipts. Some of it was on sale, and there were a number of other samples on the floor. Prices were 10c higher than on Saturday. There was not much demand and trade was about as slow as ever. No sales out of store were reported.

The demand for wheat is entirely local now, so that quotations on the basis of Mississippi river are not practicable.

Receipts of wheat to-day, 46 cars; a year ago, 54 cars.

Sales of car lots by sample on track, Kansas City: No. 2 hard wheat, 2 cars 57c, 1 car 57 1/2c, 5 cars 58c; No. 3 hard, nominally, 56c; No. 2 red, 11 cars 59 1/2c, 2 cars 59c; No. 3 red, 1 car 58 1/2c, 2 cars 58c; No. 4 red, nominally, 55c; rejected, nominally, 55c.

Corn was held higher, but there was almost no demand for the few samples. A single sale was reported.

Receipts of corn to-day, 12 cars; a year ago, 130 cars.

Sales by sample on track, Kansas City: No. 2 mixed corn, 1 car 45c; No. 3 mixed, nominally, 44c; No. 4 mixed, nominally, 43c; No. 2 white, 4 1/2c bid; No. 3 white, nominally, 45c.

Oats sold very slowly and a good many samples were on sale.

Sales by sample on track, Kansas City: No. 2 mixed oats, 5 cars 29 1/2c, 1 car 29 1/2c; No. 3 oats, nominally, 28c; No. 4, nominally, 27c; No. 2 white oats, nominally, 32c@33c; No. 3 white oats, nominally, 30c@31c.

Hay—Receipts to-day, 45 cars; market weak. Timothy, choice, \$8.50@9.00; No. 1, \$7.75@8.25; No. 2, \$7.00@7.50; fancy prairie, \$8.50@9.00; choice, \$7.50@8.00; No. 1, \$6.00@6.50; No. 2, \$5.00@6.00; packing hay, \$3.50@4.50.

St. Louis Grain.

ST. LOUIS, April 22.—Receipts, wheat, 7,374 bu.; corn, 19,300 bu.; oats, 45,000 bu.; flour, 5,600 pkgs.; shipments, wheat, 19,400 bu.; corn, 42,400 bu.; oats, 11,100 bu.; flour, 5,800 bbls. Wheat—Cash, 60 1/4c; April, 61c; May, 61 1/2c; July, 62 1/4c. Corn—Cash, 45c; April, 45 1/2c; May, 45 1/2c; July, 46 1/2c. Oats—Cash, 33c; May, 30 1/2c; July, 27 1/2c.

Kansas City Produce.

KANSAS CITY, April 22.—Eggs—Receipts light: strictly fresh are quoted at 10 1/2c per doz. Poultry—Receipts limited and market stronger. Hens, 6 1/2c@7c; springs, \$3.50@4.00 per doz.; roosters, 15c. Turkeys are scarce; gobblers, 8c; hens, 9c. Ducks, steady, 7c. Geese, slow, alive, 4 1/2c@5c. Pigeons, firm, \$1 per doz.

Butter—First-class table butters are scarce and firm, while the market is well supplied with commoner grades. Extra fancy separator, 19c; fair, 15c; dairy, fancy, firm, 15c; fair, 11c@12c; store packed, 13c@14c; fair, packed, 8c@9c; packing, weak, 5c@6c; old, 4c; stale butter finds no sale.

Fruit—Apples, supply moderate; market barely steady on good apples; standard packed ranged from \$3.50@4.00 per bbl.; others, \$2.00@3.00; best fancy stand, \$5.00@5.50; Ben Davis, \$4.00@5.00; common varieties, \$2.25.

Vegetables—Potatoes, the market is firm; ordinary kinds, common, 40c@50c per bu.; sweet potatoes, red, scarce, 25c@30c per bu.; yellow, 25c@30c per bu.; Utah and Colorado, market fair; choice mammoth pearl, white, best, 70c@75c; No. 2, 60c@65c.

SHOEMAKER'S POULTRY BOOK The finest on earth, 84 pages printed in color. Photo Engravings of the largest Poultry Farm in the Northwest. Description and prices of all varieties, over 70 finest engravings you want one; only 15c. C. C. SHOEMAKER, Freeport, Ill.

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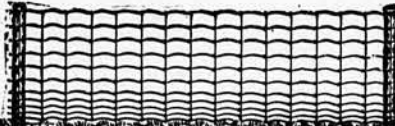
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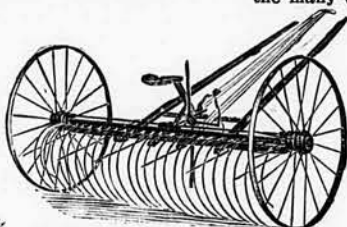
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Are furnished when ordered. They attach behind the Shovels & Disks. They level and Pulverize the Ground perfectly.

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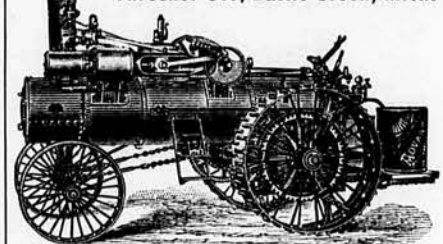
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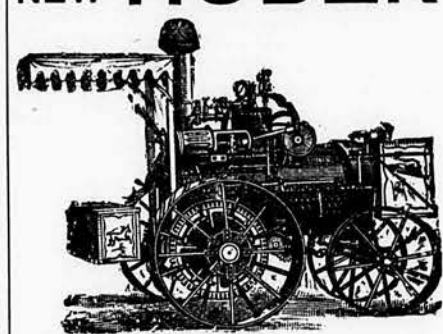
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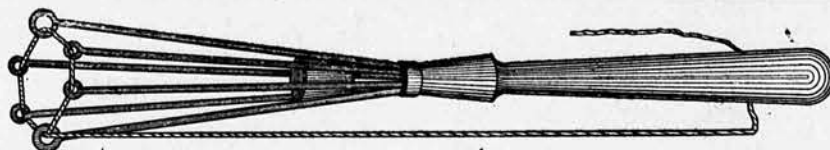


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	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Cars.
Official Receipts, 1894.....	1,772,545	2,547,077	589,555	44,237	107,494
Slaughtered in Kansas City.....	959,646	2,050,784	387,570		
Sold to feeders.....	308,181	11,496	69,816		
Sold to shippers.....	400,965	468,616	45,780		
Total sold in Kansas City, 1894.....	1,677,792	2,530,896	503,116	28,903	

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BREEDERS' DIRECTORY.

(Continued from page 1.)

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250 head headed by Swi. Tecumseh 11929 S., by L's Tecumseh 11413 S., and Billy Wilkes 9309 S., by George Wilkes 5550 S. A public clearance sale on Thursday, February 14, 1895, of 75 sows bred to these and other noted boars. Inspection invited.

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150 in herd. Boars in service:
Admiral Chip 7919 S., George Wilkes
Jr. 11893 S., Corbett 11859 S. and Winterscheidt's Victor
(Vol. 9). 45 sows bred for coming pig crop. 10
young boars and 40 gilts ready to go. Write or come.

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Registered Poland-China Swine.
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20 brood sows, headed by Tecumseh Free Trade
10783 S., assisted by a son of Benton's Last 8227 S.
Some of best females bred to Butler's Darkness,
Black U. S. Nemo (Vol. 9) and Victor M. Jr. (Vol. 9)
Correspondence and inspection invited.

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Breeders of
POLAND-CHINA SWINE
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will be shipped to any. Come and see us or write.

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PEDIGREED POLAND-CHINAS.

B. R. ADAMSON, Prop., Ft. Scott, Kas.
25 highly-bred brood sows of best strains, headed
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uals sold this season. 25 youngsters coming on
now for choice. Write or come and visit my herd.

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All ages for sale. Herd headed by Dandy Jim Jr.
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46 brood sows in herd, headed by Black U. S. Nemo
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Light Brahmas and G. L. Wyandottes.
Herd headed by Anxiety 20251 A., assisted by Com-
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JAS. MAINS, Okaloosa, Kas.
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A grand lot of sows bred to Monroe's Model, Excel,
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Breeding stock recorded in Ohio P. C. R.

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IRWIN & DUNCAN,
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Breed and have for
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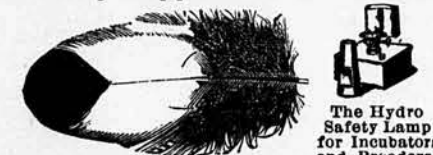
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THE STRAY LIST.

FOR WEEK ENDING APRIL 10, 1895.

Greenwood county—J. F. Hoffman, clerk.
MULE—Taken up by A. B. Doward, in Fall River
tp., P. O. Eureka, December 10, 1895, one bay mare
mule, no marks or brands; valued at \$15.

Brown county—J. V. McNamar, clerk.
MARE—Taken up by R. A. Henry, in Walnut tp.,
March 25, 1895, one four-year-old bay mare, silt in
right ear, no other marks or brands.

Gove county—W. J. Heiney, clerk.
TWO MARES—Taken up by W. J. Heiney, P. O.
Gove City, January 31, 1895, two mares—one dark
bay and one sorrel; sorrel mare branded somewhat
similar to on right hip; bay mare hind feet white;
valued at \$35.

Pratt county—M. C. Briggs, clerk.
BROOD SOW—Taken up by C. Decker, in Spring-
vale tp., P. O. Springvale, March 5, 1895, one black
brood sow, 18 months old; valued at \$5.
SIX SHOATS—By same, six black shoats, five
males and one female, 6 months old; valued at \$9.

FOR WEEK ENDING APRIL 17, 1895.

Cherokee county—P. M. Humphrey, clerk.
HORSE—Taken up by C. B. Bates, three and a
half miles south of Cherokee, Kansas, one bay
horse, fifteen hands high, harness and saddle marks,
shod all round, branded 9 on shoulder, 10 years old;
valued at \$20.

FOR WEEK ENDING APRIL 24, 1895.

Labette county—J. F. Thompson, clerk.
HORSE—Taken up by Mary Shortridge, in Oswego
tp., March 3, 1895, one dark bay horse, 9 years old,
no marks or brands; valued at \$35.

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