

TEXAS FARM AND RANCH

VOL. XV.—No. 15.

DALLAS, TEXAS, APRIL 11, 1896.

WEEKLY \$1 A YEAR,
5c. a Copy.



Protection 58568.

Sired by Corrector 48976.

Grace 58553.

Aged 20 Months.

Champions over all Breeds.

Bred and owned by T.F.B. Sotham, Chillicothe Mo.

A PAIR OF SHOW-YARD HEREFORDS.

Texas covers so many degrees of latitude that farm notes suitable to one section would be out of date in another. In the Southern section corn is being planted a second time, cotton is up, and fruit is set. In the central portion corn is plowed out, cotton is partly up and being planted. Still farther

north corn is up and about ready for the plow and cotton will be planted next week, and thereafter until the job is done. Farmers have been somewhat delayed by rains, but are reasonably well up with their work, and the super-saturated soil, with proper treatment, will mature small grain and corn with

very little more moisture. The prospects for crops are good throughout the state.

We have known one man to make a good profit on five cows, while many of his neighbors actually lost money on double the number. There are a

lot of men who have not yet learned the secret of making money with cows. As long as they will not pay a cent, nor spend any time to gain this knowledge, nothing but loss, and that constantly, can be expected. The period of low prices will squeeze such men very sorely.—Hoard's Dairyman.

P 43 2259 - walsl

Orchard and Garden

Edited by Dr. A. M. Ragland, Pilot Point, Denton Co., Texas, to whom all communications for this department should be addressed.

NOTES AND COMMENTS.

The Connecticut Pomological Society estimates the cost of spraying at 3 cents to 5 cents per tree, according to varying conditions.

Jeff Welborn, formerly a resident of Texas, now of Arkansas, at a recent meeting of the Arkansas State Horticultural Society, delivered an address on the growing of seed potatoes in the South for the South. This is a most important question to Southern truckers, and we shall take occasion to give our readers the substance of his paper in the near future.

First of April is at hand and every indication points to a large and excellent crop of fruit of all orchard fruits, with the possible exception of apricots. The conditions of soil are more favorable than for several years; the rainfall of the past season has been sufficient, not superabundant—so that the fruit crop may be expected to grow with rapidity, now that real spring weather has begun.

While there is a possibility that another cold wave may yet destroy the roseate prospect, it is hardly to be expected. We have yet to run the gauntlet of storms and hail, but the effect of these is nearly always local and not likely to destroy the general result. Summing up the outlook, we may say that prospects for an all-round fruit crop in Texas is equal to any of the past ten years.

PROBLEMS OF NOMENCLATURES.

Speaking of the confusion in nomenclature that prevails in relation to chrysanthemums, Mr. Miller, of Cornell University station, writes as follows: "There are other problems of nomenclature which are coming up constantly. Many of them have been considered by societies devoted to other flowers or to fruits. The only real attempts to solve any of these problems have been made by the American Pomological Society, and for vegetable horticulturists. The Pomological society has drawn up a set of rules, but, unfortunately, the other societies do not follow them. What is really wanted for progress is a national horticultural society, in which professional growers of plants, amateurs and botanists may work together. The societies devoted to the culture of a single flower could cooperate with the national society. Of course, a society, as such, might not deal with problems of synonymy and classification, but its members could do so either as committees or as individual students. Records of hybridization are worth keeping, as well as many other data, for a study of the botany of cultivated plants. It is a pity that we have no horticultural society of the dignity of the Royal Horticultural Society. The American genius for organization ought to be able to create a better society for it than for our own needs."

"There is a distinction between botanical classification and horticultural classification. The world can wait for the first; the second has a daily practical bearing."

The editor of Orchard and Garden acknowledges the receipt of a copy of the annual proceedings of the Florida State Horticultural Society. This annual report is of much value to fruit growers, more especially to those who live in the Gulf coast country. The secretary of the society, Mr. A. H. Manville, Glen-St. Mary, informs us that any one sending one dollar for membership fee will receive this volume free; and by the way we will take occasion to say that it contains a tabular list of the fruits of Florida, showing the relative adaptability of the different varieties to the several sections of the state. This feature is in itself worth the price. We copy from this excellent report the following paper by Prof. H. J. Webber, on "The Plant Louse of the Melon, and its prevention."

"The most serious disease with which the melon growers of Florida (or the South) has to contend is that produced by the plant louse (aphis Gossypii) this is a small dark green bug (fly?) about the sixteenth of an inch long, which infest the lower surface of the melon leaves. Sometimes they are in great numbers and thickly cover the lower surface of the

leaves. If only a few occur on the leaf they will usually be found on or near the midrib, or some large lateral vein of the leaf, which somewhat conceals and protects them. The leaves are variously curled and contorted by the action of the pest, and the vitality and productiveness of the plant are frequently reduced. The pest sometimes runs through an entire patch, and if unchecked will almost totally destroy it. It is not only the melon growers of Florida that suffer from this pest, but also those of Georgia, South Carolina and all Southern states.

This same plant louse attacks also a number of other plants, among which may be mentioned cotton and the orange. On the orange they infest the under side of the leaves of young tender shoots and water sprouts, sometimes causing considerable damage. On cotton and the orange, the remedy here given for its treatment on the melon will answer equally well. I have made a number of experiments in treating this pest at Eustis, Grand Island, Gainesville and Ocala, and have found a resin compound spray made from resin and sal soda, to be effective in combating it. This is cheap, easily made, hard and effective, and if one is unfortunate in being bothered with the melon louse, they cannot complain longer of the lack of a remedy.

The combination of sal soda and resin to form a resin compound, was first called to my attention by the late R. W. Pierce, of Indian Springs, a member of this society, who was at one time engaged in the manufacture of soap. Hearing my paper on the white fly read before the society last year, when the resin wash was recommended as the most effective treatment, he remembered that a sal soda resin compound, much cheaper, was manufactured and might prove effective. He called my attention to the method of manufacture, since I have experimented with it as a spray for various pests. I find that a spray of similar composition has been used by Mr. Koebel in some of his experiments in Oregon and California, but it has not been brought into general use. The formula I have found the most convenient to use, and most effective in combating the melon louse, is the following:

Resin 8 pounds
Sal soda (crystalline) 4 pounds
Water to make 5 gallons

Place the resin and sal soda in a comparatively large kettle with one quart of water; boil, meanwhile stirring briskly till the resin and sal soda are thoroughly melted together and form a frothy mixture without lumps. Now add four gallons of cold water, pouring it in rather slowly, with intervals between, to avoid chilling the mixture too suddenly. When all the water is added, bring to a boil, then pour out the hot solution, straining through a coarse cloth, adding sufficient water to make five gallons of the solution. This if correctly made, forms a thick syrup solution of a dark brown, translucent color, which may be kept as a stock preparation. For use dilute the whole mixture to fifty gallons, or in the proportion of one part of the stock solution to nine parts of water. Always thoroughly stir the stock solution before measuring out to dilute. The cost of this wash, based on prices quoted by Jacksonville and New York firms, is only one-sixth of a cent per gallon for the diluted solution. The mixing of the formula for five gallons of the stock solution as above, usually requires about twenty-five minutes. Much time may be saved by mixing a large quantity at once. The materials for preparing this wash may be obtained in small quantities in any town, but retail prices are too high if it is to be used extensively. The resin compound, when diluted ready for application, forms a dirty, brownish, white mixture. It should be applied to plants as a fine spray. The handiest apparatus for making the application is a knap-sack spray pump with a vermored nozzle. The spray should not be thrown down onto the plants, as this will not hit the pests. The nozzle must be turned to one side, giving the spray a horizontal direction, turns the leaves and saturates the lower surfaces when the little pests are located. The plant louse, to be killed, must be thoroughly wetted.

"All truck gardeners should have a knap-sack spray pump, and it would be well to keep the material on hand for preparing this spray, as it is also a good remedy for the red spider and certain scale insects."

Reports of the condition and prospects continue to show a favorable

outlook for the coming fruit crop. As we anticipated, a good many early blooming sorts of fruits are dropping their germs, which were so chilled by the late frosts that their vitality was undermined. Yet a sufficient proportion remain in most cases to assure a good all round crop of fruit. Reports received from East Texas indicate a good average crop. Of this we are glad, because next summer we hope to see something of the fruit growing possibilities of that section of our great state.

Time of blooming at Fairview Fruit Farm.—We make the following notes, showing the dates of blooming of quite a number of varieties:

March 18—The Hawaii, a Japanese pear, blooming rather profuse; tree blighted some last year, so that the amount of fruit buds were reduced by the cutting back practiced. Smith's Hybrid and Garber blooming, not freely.

March 21—Apricots observed to be seriously hurt by freeze; 25 to 75 per cent are killed. Maur and Botan plums now in feeble bloom.

March 23—Arkansas Lombard and Panhandle plums blooming quite freely; trees vigorous and healthy. Vernon peach, blooming profusely; Snow Bros., now full of bloom.

March 29—Duchess, Buere D'Anjou, Japan Wonder, Reliance and Hubbard Japan pears are now in full bloom; also Texas Bell plum, and Early Red Margaret apple and Transcendent crab.

March 30—Yate's and Belle Flower apples blooming freely, likewise Ohio Prolific; Missouri apricot, Golden Beauty plums and Bartlett, Howell, B. Superfin pears. The last named shows a very scanty supply of blooms; suffered seriously from the attacks of blight the past year. Final report on blooming will be made next on apples, grapes and berries. Send your reports.

Prof. Van Deman, in a recent issue of American Gardening, gave us the history of a new berry, named by Mr. Luther Burbank, at his suggestion, the Mayberry. We copy Prof. Van Deman's account of this new acquisition to our list of small fruits:

"The editor asks if any one can say more about the Mayberry than he does in the number for March 14. There is some misunderstanding by the public about the name 'Mayberry,' etc. In the first place, when Luther Burbank, of California, first began to produce crosses between the wild Japanese raspberries and some of our native blackberries he had one that he afterwards named 'Primus,' and sold to a nurseryman of New York. Mr. Burbank and I were in frequent correspondence, and trying to decide upon a name for this new class of fruits; neither blackberries nor raspberries suggested 'Mayberry,' because of their earliness, and this is its origin. When he put out other varieties of the same general character and parentage, he called them also Mayberries. The one he called 'Golden' is a cross between Rubus palmatus, a wild species of Japanese raspberry and our common Cutbush raspberry. It is very early to ripen and of good quality, but I doubt if any berry of so light a color will prove valuable beyond an amateur's garden. It has been much overdrawn in size and distorted in shape by the catalogue makers. In one of the large catalogues for this year (1896) is one of the most enormous exaggerations of the kind that I ever saw. Primus Mayberry is there pictured as 2 1/2 inches long. By actual measurement of numerous specimens of this berry sent me by Mr. Burbank years ago (and he always sent me the best he had), the largest was just 3/4 of an inch long, and I so illustrated it in my official report for 1892. This is multiplying the weight of the berry so as to make it appear about twenty-five times as heavy as it really is."

The seed to be distributed by the government seed shop will get out to the people too late this season to help the poor congressmen in the Southern States, but our people should take will for the deed. The quantity will be considerably larger than ever before. American Gardening estimates the entire weight of the seeds to be handled under the recent act of congress at the enormous weight of 300 tons—600,000 pounds—to be transported through the mails free of expense.

Will say to W. D. Howard, White-wright, Texas: Plant your onion seed in early spring, in rows eighteen inches

apart. As soon as top dies down pull up and hang in some cool, dry, shady place. Prepare your ground in August or September and set out in October. By the 1st of May you will have nice large sweet onions. This is the only way I can have any success and I have raised onions of the Silver King variety that would weigh 22 ounces. Try my plan.—W. G. Fields, Lilaac, Milam county, Texas.

POSTAL CARD REPORTS.

Fruit is not hurt. LeConte pears in full bloom; so are nearly all kinds of plums; also peaches, grapes not pushing yet.—H. F. Kune, Hope, Lavaca county, Texas.

Peaches and plums in full bloom. Ground frozen to the depth of one inch this morning. Wind from northwest and growing colder. Some snow here yesterday, but melted as fast as it fell. No hope of peaches other than seedlings. Fruit safe up to yesterday morning. Will give other information later on.—John B. Bass, P. M., Bass, Texas.

The freeze of the 21st instant has done peaches and plums, but little damage that I can see. Moorpark apricots have set a good crop of fruit. My pear trees did not bloom very profusely owing to the blight last summer. Strawberries are now blooming very nicely. Blackberries not in bloom yet. Prospect fine. Apple trees just beginning to leave out.—J. D. Bass, Pittsburg, Texas.

The prospect for a good fruit crop in this section is fine up to this time. The late freeze of the 19th did very little damage to the crop. The most damage to anything that I have noticed is to the early Chickasaw plums. The Japan plums seems to be all right so far. I am making my first shipment of strawberries to-day. This is the first time that I ever knew of berries being shipped from this part of the state in March. If nothing happens to the crop from now on we will have a large crop of all kinds of fruit this year.—C. W. Wood, Swan, Texas.

STRINGFELLOW NON-CULTIVATION.

H. B. HILLIER.

I have long contended and practiced a thorough, but very shallow cultivation of an orchard during the spring—its period of greatest activity—because a large part of a tree's food used in the formation of fruit and foliage is absorbed from the atmosphere. The gases formed from all kinds of decay or combustion is absorbed by the air. At night the cold endured by the absence of the sun's rays, causes these gases to settle upon the earth where they are absorbed by the soil, and also growing plants. Freshly stirred soil finely pulverized, is the best possible condition for this work, and hence the benefit arising from constantly stirring the surface, but deep plowing about any growing plant is a fatal mistake.

Now, if the orchard grows up in grass and weeds, they can only absorb the plant food that is necessary for their own development, and certainly envelop the earth so as to lessen its absorbing powers if not entirely destroying it.

Besides, such plants absorb a large amount of moisture from the ground, to the great injury of the trees. Now, in the lower coast country with inexhaustible sub-irrigation this is a matter of small import, but in the higher regions of Texas our chief trouble lies in an insufficient water supply, while our strong dry winds rapidly dissipates the surface moisture. Now, it is a curious error that constant stirring of the soil will cause moisture to rise; the only good that can possibly arise from it is the absorption of moisture and gases at night from the air by fresh stored soil.

Our hot, dry winds in summer will certainly dry out the soil as deep as it is stirred, and this loose dirt must act as a surface mulch to hold back the moisture from below. Hence, when summer comes with its heat and dry winds, all cultivation should cease.

Now, from the above facts and reasonings, our friends over the state must learn that cultivation on the coast is no guide to the uplands or Pan Handle portions of the state, and the sand land in the timbered districts of East Texas require different treatment from the black land in the prairie districts.

Now, if the writers in your paper will state the kind of soil, timber sur-

CHANGE THE SYSTEM.

Milton Chance in Southern Cultivator.

The experience of the last two or three years reveals the fact that the people of an entire section of country can be brought to a state of want and suffering by an erroneous system of farming. It is a difficult matter to get tillers of the soil out of the "old ruts." They are naturally conservative and are slow to adopt new ideas. The matter of improvements in methods is one of education, and this is naturally a slow process. There is no better school-master than want. If the sufferers can only be made to see that, it will teach them to adopt better methods.

Our system of farming is young, compared to that of older countries of the globe. There are about three and a half million square miles in this country that have been brought under the plow in a short space of time, and by the results therefrom demonstrating that our system tends to destroy rather than build up our lands. Nature is ever active behind the farmer with the loblolly pine and other timber subsiding and shading the exhausted soil, or we would have a barren waste to bequeath to posterity. The system of soil depletion and spoliation should be stopped.

The fact is, that if our farms were managed as they ought to be, making all the supplies needed at home, the money would so adjust itself that the farmer would have less use for it. He does not handle much of it any way under the present system, although there is more demand upon him for it.

Our fathers who opened up the large plantations of sugar, cotton, cane and rice, brought the hog and other industries along with them, and were wiser in this respect than their children. They were more of a success in making money, and many of them acquired fortunes, that their sons have dissipated in experimenting with cotton and free labor.

Cotton is dear at any price if we have to buy everything to make it with. Whether the crop is large or small, the farmer who makes all he needs on his own farm will not be in a condition of want and suffering.

TEXAS TOBACCO.

Waco Correspondent of Dallas News.

Waco, Tex., April 2.—George T. Holman, deputy internal revenue collector, has a number of samples of cigars made wholly of Texas tobacco, which he says are being sold on the Eastern market at \$60 and \$75 per 1000, with a demand increasing too fast for the capacities of the factories. Mr. Holman has just returned from an official trip over the Texas tobacco belt. He says the devastation of the tobacco districts in Cuba awakened attention to the Texas product, as the old supply was thereby cut off, and now the high quality of the Texas tobacco having been demonstrated, the demand is regarded as permanent.

Mr. Holman is hopeful of great results in Montgomery and other Eastern counties. He says large towns will spring up from the profits of tobacco and the demand will extend into foreign lands. French and German agents

have been looking over the field with a view to placing orders for leaf tobacco for their home manufacture, and this competition will keep up the profit of the growers. Mr. Holman was informed that there is no drawback to the culture in either soil or climate. The autumn dews come just right to make the leaf take the degree of body desired. He found the best lands advancing in price, the growers and manufacturers cheerful, and the transportation companies in anticipation of profitable business hauling Texas tobaccos to the most distant markets.

AN EPICURIAN ACHIEVEMENT.

While very few people live to eat, still the most abstemious will readily admit that nothing is so conducive to long life, happiness and peace, as well prepared and wholesome food. Add to this service and you but increase good results. In no other department of railroad business has the improvement been more marked than in culinary arrangements. Dining cars with all the delicacies of the season have relieved the passenger of the lunch basket nuisance; eating houses, first class in appointment and service, have added attractions to travel and dissipated the terrors of indigestion. The Missouri, Kansas & Texas Railway boasts of its eating houses as the equal of any in the land. No pains have been spared to make the fare as good as the best of hotels and the universal satisfaction of patrons attests the success of the management in this particular. In calling the attention of the public to this most necessary incident of travel, the following Easter Menu prepared by Mr. F. E. Miller, Superintendent of Dining Service of the M. K. & T., is submitted as a sample of what the Katy spreads for its patrons while en-route:

DINNER.

Gulf Oysters
Tomatoes Young Onions Queen Olives
Radishes
White Plume Celery,
Sea Trout, Genoise Sauce,
Duchess Potatoes.

Tenderloin of Beef, Braised
New Potatoes, Stringless Beans.
Amourettes of Spring Lamb, Tomato
Sauce.

Green Peas, Brussels Sprouts.
Roast Chicken, Stuffed.

Cream of Violet Punch.

Letting Salad, French Dressing.

Queen Pudding, Wine Sauce.
Apple Pie, Lemon Meringue Pie
Easter Cake.

Lady Fingers, Macaroons,
Cocoanut Cake,
Strawberries.

Fruits, Nuts, Raisins.
Cheese, Crackers.
Coffee.

Easter Sunday.

April, 5th, 1896.
Meals, 50 cents.

The above is but one of the many spreads with which Mr. Miller has delighted all travelers and of which the Company is more than proud.

For Sale and for Exchange.

Lands, town property, live stock for exchange. \$300 in vendor's scrip notes and \$250, \$500 or \$2000 in lands for goods. Everything exchanged. What have you? Wanted: Stocks of goods, oil launch, ice machine, live stock—everything. Send for list. Jersey cattle, fast pacer, Standard stallion, Shetland ponies for sale. R. L. JENNINGS, Marshall, Texas.

Farming and Stock Growing.

Raising feed for cattle and hogs paid for 1895, and for 1896. I have two 640-acre tracts of good land in eastern part of Baylor county, Texas, 14 miles east of Seymour, 30 miles west of Wichita Falls, 5 miles from station. On one tract is one small house, and 180 acres cultivated, 100 acres now in wheat; the other, 150 acres farmed, 100 now in wheat; three to five tons per acre of sorghum, Kaffir or Jerusalem corn grows every year wet or dry. For sale, or will exchange for good black land. I'm no stockman. My land is free from debt of any kind.

S. M. SMITH,

Board of Trade Building, Fort Worth, Texas.

FOR SALE.—Having sold the 800 acres advertised in your paper, we now offer 640 acres of the very best black wax land, lies well and in nine miles of Fort Worth and in six miles of the packery. This land will be sold in 30-acre tracts or more at \$20 per acre. It is fenced and all in grass. Two miles of depot, school and church, two miles of timber. Surface well water in 20 to 40 feet; artesian water 300 feet.

Terms, ten years time at 5 per cent. interest. Buyer must pay 1-10th cash, or build a house and break 1/2 of the land before he gets a deed. The terms will be made in ten annual payments, or the money can be paid at any time. The land will pay for itself, and all we want is workers. No Johnson grass.

Now do not write to us about this land. We have done our best to describe it. We sell men who come to see land. We are busy and want to reach hard-working men who want homes on black wax land near a good market.

HUFFMAN & CO.,

Fort Worth, Texas.

Arcadia

Only 21 miles from Galveston,
on the Gulf, Colorado & Santa Fe
R. R.
Fine Alluvial Black Sandy Loam.
FREE FROM TAXATION until A.
D. 1900.

For further information apply to

H. J. RUNGE,
GALVESTON, TEXAS.

South Texas Lands

will produce as much corn and cotton as the best land in North Texas. Corn is worth nearly twice as much in South Texas as in North Texas; cotton is worth from \$1 to \$5 per bale more than in North Texas. Deep water at Galveston brings us in touch with all the markets of the world. South Texas lands sell at from \$5 per acre up. Write or call on CASH & LUCKEL, Houston, Texas, and Galveston, Texas.

350 FARMERS WANTED

In the Pecos Valley of New Mexico,

Each to raise ten acres of sugar beets for the new Beet Root Sugar Factory to be immediately erected at Edinburg, New Mexico, to use up the fall crop of 1896. The sugar beet will yield from 15 to 30 tons per acre under good cultivation, and the farmer can safely figure on a price of \$1 per ton for beets carrying 15 per cent. of sugar. The percentage varies from 15 to 25 per cent.

Come and investigate, and use the excursions of APRIL 21st and MAY 5th, on which days round trip tickets can be had at all stations of the Texas & Pacific railway east of Weatherford at ONE FARE FOR THE ROUND TRIP. For further information write to

F. E. ROESLER,

Travel Passenger Agent Pecos Valley Ry.,
195 Main Street, Dallas, Texas.

A BARGAIN IN A FINE FRUIT FARM on the Gulf Coast. 45 acres in 3-year-old trees. Address A. L. F. H. H. TOLAB, Arcadia, Texas.

RAILROAD LANDS

For Sale at Low Prices and on Easy Terms.

The Illinois Central Railroad Company offers for sale on easy terms and at low prices, 150,000 acres of choice fruit, gardening, farm and grazing lands located in

SOUTHERN ILLINOIS.

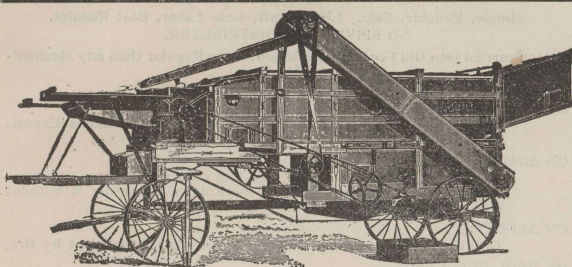
They are also largely interested in, and call special attention to the 600,000 acres of land in the famous

YAZOO VALLEY OF MISSISSIPPI.

lying along and owned by the Yazoo & Mississippi Valley Railroad Company, and which that Company offers at low prices and on long terms. Special inducements and facilities offered to go and examine these lands both in Southern Illinois and in the "Yazoo Valley," Miss. For further description, map and any information, address or call upon E. P. SKENE, Land Commissioner, No. 1 Park Row, Chicago, Ill.; or G. W. MCGINNIS, Asst. Land Commissioner, Memphis, Tenn.



Metal WAGON WHEELS
Absolutely Reliable.
TIRE STEEL TIRE OPEN-
HEARTH STEEL SPOKES
SPOKES DON'T TOUCH
GROUND—Riveted to tire.
CAN'T SHAKE LOOSE.
IT'S SKIN-
Size 24 to
36 inch. If
your dealer
doesn't
write us direct
We'll sell you
a SET.
Wheel Dept. B
STODDARD
MFG. CO.
Dayton, Ohio.



Correspondence wanted with all buyers. Write for 1896 CATALOGUE, stating your want in the Thresher line.

—MANUFACTURERS OF—

J. I. Case Improved Locomotive Style Traction Engine,
Straw-Burning Traction,
Compound Traction Engine,
Plain Portable Engines,



Nethery and "Uncle Tom" Wind Stackers,
Case Improved Woodbury-Dingee Light Draft Horse Powers,
Self-Feeders,
Telescope Weighers, Swinging Stackers.

The Largest Manufacturers of Threshing Machinery in the World.

Address

KEATING IMPLEMENT & MACHINE COMPANY,
STATE CONTRACTING AGENTS, DALLAS, TEXAS.

escape a freeze, fruit prospects never better.

Irish potatoes, tops two feet high and have blooms.
Skidmore, Texas.

STATE HORTICULTURAL MEETING.

Editor O. and G.: At our last annual meeting at Bowie the State Horticultural Society accepted a very cordial invitation of the people of Tyler and of the Fruit Palace Association, to meet at Tyler in 1896. Accordingly, soon after the reorganization of the Texas Fruit Palace Association, a few days ago, President Swan invited Secretary Huffman and myself to be present at the meeting of their directors in Tyler on March 31st, in the interest of this meeting.

Unfortunately, Secretary Huffman was detained by sickness.

It gives me great pleasure to state that in their meeting on the 31st of March, the directors of the Fruit Palace repeat their very cordial invitation to our society to meet with them, assuring us of their hearty co-operation and support. A resolution was passed offering to pay the usual premiums offered by our society, and tendering us the use of sufficient space in the Fruit Palace building in which to display our exhibits and hold our sessions. I was much impressed with the broad-gauge views of the Tyler people in this great enterprise for the rebuilding of not only the Tyler section, but the entire state as well.

I am sure they have selected wisely in making up their board of directors, who are broad-gauge, liberal, discreet, sound men.

Smith county has a magnificent prospect for fruits of every kind, and every one seems confident of success. So may it be.

Truly grateful to the Tyler people and to the president and directors of the Texas Fruit Palace Association especially, for the many courtesies extended to me as the humble representative of our State Horticultural Society, I respectfully urge upon every member of our state society, and of every local society, as well as upon every advocate and well wisher of Texas horticulture, "the art that doth mend nature," the medium by which we may break the shackles of King Cotton, and bring about a more healthful diversified husbandry, to come up to the help of this great cause and let us co-operate with the Tyler people and make this joint and happy meeting in July, of all our Texas horticulture with our magnanimous host, the Fruit Palace, a grand success. Our executive committee will meet in a few days and prepare a program and a premium list, which will be widely distributed. The Fruit Palace will open July 4th and close July 18th. The meeting of our state society will be during this time, the days to be fixed and announced very soon. Very Respectfully,

JOHN S. KERR.

HIGH PRICED FRUIT.

Garden and Forest.

Oranges are in plentiful supply from the Pacific coast and the Mediterranean and continue to sell at low figures, although there has been an advance of fifty cents a box during the past fortnight. While Florida oranges are extremely scarce and consequently high-priced, \$1 apiece, as stated by us last week, is evidently an error, that being the rate for a dozen. Grape-fruit, the high price of which we noted last week, has since then continued to advance, and the limited importations, now at the close of the season, are commanding extraordinary sums. A few days since two barrels of small-sized grape fruit realized the extraordinary price of \$20 each in this city, and seven barrels were sold in Philadelphia for \$22 each.

HOW A TREE GROWS.

Fruit Grower's Journal.

If you wish to become thoroughly acquainted with the tree's method of growth the first thing of importance is to keep in view the function of the "cambian layer"—the soft spongy substance lying between the wood proper and the bark, says the St. Louis Republic. The pulpy, porous substance is really a tissue of minute cells, visible only under the microscope, and apparently of the same size and shape in any given variety of tree. The cells lying nearest the bark contribute a permanent accretion to the tree's covering, while those which lie nearest the wood slowly change from "cambian layer" to real tree fibre. In this way the bark becomes thicker each

year, and at the same time the tree itself is permanently enlarged.

In the spring and early summer the bark on all the trees is, to a certain extent loosened to permit the cambian layer exercising its functions, and when this wholly ceases the result is manifest in the "ring" of new wood and the thin layer of newly formed inner bark. The ends of each limb have also grown perceptibly—from two inches to two feet, according to the species—but knots, marks, forks, etc., on tree trunks are no higher from the ground than they were the year before. If some one tells you that a limb which is now but three or four feet from the ground "will be high enough to walk under when the tree gets its growth," put him or her down as a person knowing but little about the natural history of trees.

A GLAD EASTER-TIDE.

Winter is over, the buds and the bells of sweet springtime are at hand; Bird-songs awaken the woods and the dells, And sunshine gladdens the land.

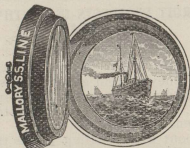
The beautiful menu card used at the eating houses of the M. K. & T. Ry. for the Easter Sunday dinner will be sent free on application to W. G. Crush, G. P. and T. A., Dallas, Texas.

SPRAYING FRUIT TREES.

The benefits to be derived from Spraying Fruit Trees is now so well known that tens of thousands of farmers and fruit growers are looking for a good spray pump. It is difficult to determine which of the many pumps advertised is best, as all pumps look well on paper. There is no safer way than to take the advice of our leading State Entomologists and large fruit growers, and profit by their experience. First they tell us brass is the only material that will withstand the action of chemicals used in spraying. You should therefore buy an all brass pump, as cast iron soon rusts, corrodes or breaks and becomes worthless. Second, they tell us that the pump should be fitted with fine spray nozzles and a good quality of hose. Third, that the pump should be easy to operate. Fourth, that it should have a reliable automatic mixer. Fifth, that it should have expansion valves, and Sixth, (we add), the manufacturer should guarantee satisfaction. If they will not do this you are buying a "cat in the bag." It gives us pleasure to call the attention of our readers to the spray pumps manufactured by the P. C. Lewis Mfg. Co., of Catskill, N. Y. We believe their pumps fully meet all the requirements, as they are made entirely of brass. The hose is guaranteed to stand pressure of three hundred pounds. They furnish either the fine graduating spray nozzle or Vermorel nozzle. Their pumps are equipped with reliable automatic mixers and expansion valves. They warrant all pumps for three years and guarantee that each pump sold shall give absolute satisfaction or money refunded, and they are endorsed by the leading entomologists of the U. S. We would suggest that parties interested in spraying write them for their illustrated catalogue and full treatise on spraying which will be sent free.

Are you going North this summer? There is no more delightful trip to New York and Eastern cities than via the Mallory line, sailing from Galveston every Wednesday and Saturday. The rates are low, the steamers' accommodations and service are strictly first-class in every particular.

Secure a copy of Golden Opinions and read what Texans have to say about the



trip. Tickets, state rooms, etc., can be secured at any railway ticket office in Texas.

A letter addressed to Mr. W. J. Young, San Antonio, will bring you by return mail all information desired.

Mr. Young is also agent for the European steamship lines, and is always ready to give full information as to the sailings and rates by any steamship line from New York. Always write him for exactly what you want in the way of accommodations, etc. Address, MR. W. J. YOUNG.

Gen. Southern Pass. Agt., Mallory S. S. Line, San Antonio, Tex.

Correspondence

BEE KEEPERS MEET.

Dallas, Texas.

Editor Texas Farm and Ranch:

The 18th annual meeting of the Texas Beekeeper Association convened in Greenville on the 1st of April.

The meetings were held in the office of Col. W. R. Graham. It had been the intention of the Mr. Graham to have the meeting in the beautiful grove opposite his Bee Hive manufactory, but a sudden change of temperature drove the workers into the hive. Twenty-five members answered to roll call. Those in attendance were: Dr. W. K. Marshall, of Marshall, president; Mr. W. H. White, Blossom, secretary; W. C. Lee and H. S. Boyle, Pike; C. J. Cutler, Dallas; A. M. Tuttle, Gainesville; F. J. R. Davenport, Nash; W. T. Pryor, Farmersville; F. W. Garrard, Kaufman; W. M. Stapleton, Dent; Joel and Miss A. W. Simmons, Wolfe City; L. J. Green, Kingsley; J. S. Shook, Royce; J. R. Reeder, Campbell, and W. R. Graham, J. A. Kimberlin, R. E. Spradling, M. Kimbrough, G. L. Tipton, R. D. Wadde, W. W. Waddle, A. D. Morgan, A. G. Pace and Dr. S. J. Duff, all of Greenville.

Dr. W. K. Marshall, of Marshall, opened the meeting with prayer and called upon the association for questions upon which information was wanted. Dr. Marshall, commenting on what had been accomplished in the past, said: "I think we are upon the threshold of a new plan of bee-keeping."

In answer to the question "What honey plants are disappearing from cultivation?" Mr. Graham replied, "The rattan and Linden." "What plants have been on the increase?" Sweet clover was reported by a number. The clovers were discussed as honey producers and as fertilizers and renewers of worn out lands. The decision was made that sweet, crimson clover and alfalfa are fine honey producing plants.

"What is honey dew?" was answered by Dr. Marshall in a very interesting talk. The Dr. says there are two kinds of honey dew, one produced by an insect, the other is a saccharine product of the tree or plant upon which it appears. The hickory and red elm were cited as trees rich in this element. The conclusion arrived at was, that the honey dew in the North is the product of an insect, in the South it exudes from the leaves of trees upon which it is formed.

Do bees find honey upon the elm? Dr. Marshall: You may be sure they do. A bee is always strictly bent upon business; he doesn't waste his time. Wherever he is found at work he is gathering honey.

Is cotton a good honey plant? After much discussion it was decided to be one of the best, if not the best honey plant in the cotton growing belt. It has been determined by experienced growers that there are two kinds of honey made from the cotton blossom. One very light in color, the other dark. The light is that gathered from the blossom before it has turned red; the dark is that gathered from the blossom after it has turned red. Cotton grown upon sandy land yields a larger amount of honey than that grown upon the black-waxy lands. Honey made from the cotton blossom granulates more readily than that from any other source. Exposed to the light it granulates much sooner than when kept in the dark. A bottle of extracted cotton honey exhibited by Mr. Kimbrough was pronounced to be exceedingly fine. It had the appearance of coarse grained sugar.

In answer to the question, "How much honey should be taken from a gum in a season?" Dr. Marshall replied, "That depends upon the strength of the colony and upon the season. In 1890 I took from a bee tree 400 pounds of honey."

Col. Graham made a very enthusiastic talk upon the subject of honey making to impress the members with the season upon which success greatly depended, upon the profit of honey and when properly handled and marketed. He sells his crop of honey at home without any difficulty and could sell much more.

Dr. Marshall thinks there is much greater profit in selling comb honey than in extracted honey. Mr. Davenport, from Nash, gave a similar experience. His supply was never equal to the demand, and his market was a home market—Waxahachie—and comb

honey sold. Always had more orders than he could fill.

An adjournment was had for dinner, and the whole convention was most hospitably entertained by Col. Graham and two neighboring bee men whose names we failed to get.

Mrs. Graham's well-filled table of substantial and dainties was circled by the hungry crowd many times without seemingly any diminution of supplies. When we suggested to her the trouble and labor necessary to feed such a hungry crowd, she good-naturedly replied, "Oh, it is no trouble. I have grown to look forward to it as I do to campmeeting and we all enjoy it."

It was a regular old Virginia dinner, viands, hearty welcome, and genuine hospitality. May they live long to dispense such, and their generous deeds crystallize into a shining crown in the "house not made with hands."

In the afternoon there was an interesting and instructive discussion, with practical illustrations with the various parts of the hives, of questions of vital importance to bee keepers.

How to fasten foundation in brood frames? How in sections?

What is the best plan to start be to filling sections?

Which is the best hive?

What is the best plan for watering bees?

Will ribbon cane syrup feed bees?

To this last question the answer was:

In the absence of anything better syrup made from sugar cane might be used. The majority favored a good grade of sugar diluted to the consistency of syrup, to be fed late in the evenings.

Dr. Marshall briefly described the care and management of bees in a manner especially interesting and profitable to beginners. At 4 o'clock the session was adjourned closing the first day's work, and we had to hurry away to catch the train.

The meeting was full of interest; those engaged in the business were enthusiastic and gave evidence of much patient and careful investigation, and it certainly requires a patient, painstaking person to pursue this business, and withal a lover of nature; one who studies her most minute secrets, who learn to look "from nature up to Nature's God."

MRS. S. E. BUCHANAN.

THE BROWNWOOD STOCK SHOW.

Waxahachie, Texas.

Editor Texas Farm and Ranch:

My trip to Brownwood was exceedingly pleasant from start to finish. It would be hard for me to tell just how pleasant I felt when I boarded the Santa Fe and felt that I was at least for a short time free from the restraints of home rule and woman's rights. I said to Uncle Short: "Now, young fellow, you are free, have a good time," and I did. I shall ever feel good toward the Santa Fe people for the universal kindness shown us, and the first-class eating houses or hotels they have established along their lines. Their coaches are always clean and nice, their roads fair and their time good. I reached Brownwood at about 9 p. m. Thursday night. Friday morning, being myself of very industrious habits, I awoke very early (about 7 o'clock) to hear the falling sleet rattling against the window panes. Oh, how sad I felt, for I was very sure that the stock show was all knocked in the head, for very soon I saw lightning flashes and heard loud thundering, and then the sleet began to pour down in good earnest. The clouds looked threatening and though there were intervals between the showers, I still felt that surely the show was spoiled; but being a hard-headed farmer and a little plucky, I started out and soon found the place appointed for the stock show. Almost the first man I met was my friend, J. H. Drinkard. He was on hand with his Berkshires, and to my astonishment I found already quite a nice little exhibit of stock on the grounds, and in a very short time others began pouring in, and by 11 a. m. the stalls were nearly all filled with horses, hogs and cattle, and I am sure that I have never met so many jolly, good-natured, big-hearted fellows as I met just here. It was easy to read in their faces "We have met to have a good time and we are going to have it, rain or shine," and they had it. Friday was spent in meeting greeting and hand-shaking, and in getting everything in trim for the big crowd that was expected Saturday. The sun rose very early Saturday morning clear and bright, and sure enough the big crowd came. The

disposing causes, where the animal is exposed to the action of the germ.

The introduction and spread of the disease is due in all instances to the action of the germ. In the South, where most cattle lead an out door life, the chances of infection are reduced to a minimum.

The most important source of danger, then, to the Southern breeder is the importation of animals from Northern and Eastern herds. This is frequently done by our breeders for the purpose of improving their herds, which is to be commended when the proper precautions are exercised. It is a noteworthy fact that an animal may be tuberculous and still show a perfect physical condition, and in many cases the disease cannot be detected by the most rigid physical examination. In many instances its presence may be suspected by a continual cough and the animal remaining in poor condition.

No accurate estimate can be made concerning the per cent of herds infected in the North and East, but it is known that the disease is wide-spread and occasions more loss to the breeder than all other causes combined.

I have known of dairy breeds being tested by health officers, and as high as 30 per cent of the cows found tuberculous.

If thorough-bred herds are infected with the disease, it can be easily seen how they may spread the disease by being shipped to different parts of the country, and introduce into healthy herds.

Dr. Koch placed into the hands of scientists a lymph which he called tuberculin, and which has proved to be a most valuable and reliable agent in diagnosing tuberculosis in the bovine species. A description of this article and method of using would be out of place in this article.

Breeders should, under no circumstances, put themselves to the expense of shipping fine animals and introducing them into healthy herds unless they have been previously tested and found free from the disease.

How shall we dispose of the diseased animals?

This is a question that has been answered satisfactorily to all concerned. Some favor quarantine, but the majority of dairymen who have experienced losses from this source, believe that the only practical method of dealing with this disease is to destroy all diseased animals, thoroughly disinfect the premises, then admit none but tested animals into the herd.

Boone, Iowa.

FROM A MASON COUNTY BREEDER.

M. A. HAMILTON.

Yours of recent date received.

Now, while I have not either the ability or time to write anything that farmers or stockmen would profit by reading, yet I would like to say a word in regard to want of reading matter to be found in the home of the average farmer and stock raiser of this immediate section of Texas. And I will stop right here to say I think Texas Farm and Ranch has no equal in Texas as a paper for the stock farmer.

Of course I am considered a crank here because I breed nothing but registered stock.

My herd of registered Jerseys, of St. Lambert, Coommasse, Stoke Pogis, St. Helier, and other leading strains of blood, are the very best that I could buy. My herd of twenty cows and heifers are headed by my grand bull, Signal Oak of Brushy, dam test 21 pounds in seven days; sire's dam test 17 pounds ounces in seven days, and 600 pounds in 299 days. Signal is six years old and weighs 1550 pounds.

My herd of registered Berkshire swine, headed by a grandson of Longfellow, are also as good as money could buy.

I am a Texas boy and have handled stock more or less all my life; but when I decided a few years ago that farming would not pay in this part of the one Star state unless a man had good stock to eat what he could raise on the farm. I began to buy a few fine cows. Then my neighbors began to poke fun at me. But now I think I have the laugh coming my way. Since January 1, 1896, I have sold five registered heifers and one bull at good prices, and have sold thirty Berkshire pigs at from \$10 to \$25 per head. I keep all of my stock on less than one hundred acres of land, seventy of which is in cultivation, and sown this year in oats, millet and cane. I have my land under a high state of cultivation and have more fences and more gates than any other farm in Mason county of equal size. I have the

largest barn in this county and raise and put up my own feed; am the only breeder of registered stock in Mason county, and think it pays me well to take three or four of the best farm and stock papers published, not the least of which is Texas Farm and Ranch.

There is none a week but some stockman or farmer asks me where he can get a certain breed of cattle, hogs or fowls, and when I ask, "don't you take Texas Farm and Ranch, Stockman and Farmer, or some other paper," they say: "Well, no; times are too hard." Just think of it; this is a splendid stock country full of scrub stock, and not a half dozen stock and farm journals come to this postoffice. Send me a few samples and I will make an effort to wake somebody up.

Mason, Texas.

HOG SALES AT CEDAR VALE.

I herewith hand you sales of Poland Chinas from Cedar Vale farm for the month ending March 31, 1896:

One boar, T. C. Gibbs, Huntsville, Texas.

One boar, one sow, Lee Baker, Paradise, Texas.

One boar, one sow, J. J. Kalin, Cottdale, Texas.

One boar, one sow, E. C. Maddox, Mineral Wells, Texas.

One bred sow, J. B. Stagner, Bolivar, Texas.

One bred boar, J. B. Stagner, Bolivar, Texas.

One boar, J. J. McDaniel, Fort Worth, Texas.

One boar, one sow, J. K. Long, Denison, Texas.

One bred sow, W. H. Forey, Dallas, Texas.

One boar, Stuart Harrison, Fort Worth, Texas.

One bred sow, T. J. Downey, Hubbard, Texas.

One boar, Dr. R. E. Grigg, Ad Hall, Texas.

One boar, M. L. Rice, Bowser, Texas.

When a buyer comes the second time he always buys better than he did the first. This is frequently illustrated here on the farm. In 1893 Mr. J. B. Stagner, at that time of Plano, Texas, visited my farm and selected some stock that have proven a good investment. He has recently made another visit, and this time at \$100 secured a plum in the yearling boar Black U. S. Success, a great individual, a show boar with 62½ per cent of Black N. S. blood in him, 37½ per cent Orient blood, and a breeder that you seldom find the equal of. Mr. V. H. Forey, formerly of Shreveport, La., where I sold him stock on order, now located in Dallas, secured the grand yearling sow, Lady U. S. E., No. 89,084, at \$100, by Sensation F. heby One Price, by Black U. S., dam Lady U. S. 2d, by Guy Wilkes 2d, 17,777; 2d dam by Black U. S. Since being shipped she has farrowed eight beautiful pigs by a leading boar of Iowa, Ohio, No. 34,297. Mr. T. J. Downey of Hubbard, bought a good young sow in farrow in 1895. He now buys an extra good one at \$50. Mr. Stuart Harrison of Fort Worth secured a cracker-jack in a five-months boar pig at \$25, and yet the supply is not exhausted. Cedar Vale can furnish you a good one or a cheap one.

H. E. SINGLETON.

TEN CENTS A TON.

JOHN HOWARD.

In my letter published in last week's Texas Farm and Ranch under the head of "Green Sorghum Stacked," in which I replied to a former letter of Mr. Davis, of Pilot Point, Texas, the printer made me say that Mr. Ed East, of Archer county, Texas, is a very "fussy" man. Instead of this it should have read: "Mr. East is a very busy man, and might not take time to answer Mr. Davis' letter, etc. No, Mr. East is not a 'fussy' man. He is a good-natured, up-to-date stock farmer and breeder, and the people of this section are going to profit by his experience and enterprise in this stock-feeding business.

I notice a letter from Mr. G. W. Jenks from Stevenson, Texas, also, in your last week's paper, under the head of "Green Sorghum Stacked." One would naturally infer from the tone of Mr. Jenks' letter that my former letter on stacking of green sorghum, which I signed "Occasional," was on the "fishy," or "boom" order. Did Mr. Jenks know Texas Farm and Ranch as most of us do, such a thought would not have entered his mind. No, Mr. Jenks, what you see in that paper, 'tis safe to say "tis so." Texas Farm and Ranch folks don't give space to "fishy" letters or to "boom" correspondents; they protect their readers from fake advertisements and those who would mislead the

ARMSTRONG & McKELVY

Pittsburgh.

BEYMER-BAYMAN

Pittsburgh.

DAVIS-CHAMBERS

Pittsburgh.

FAIRBANKS

Pittsburgh.

ANCHOR

Cincinnati.

ROCKSTEIN

Atlantic.

BROOKLYN

New York.

JEWETT

Utah.

UNION

Chicago.

SOUTHERN

Chicago.

SHIPMAN

Chicago.

COLLIER

St. Louis.

MISSOURI

St. Louis.

RED SEAL

Southern

JOHN L. LEWIS & BROS. CO.

Philadelphia.

MORLEY

Cleveland.

SALEM

Salem, Mass.

CORNELL

Buffalo.

KENTUCKY

Louisville.

public. I have known the manager of

Texas Farm and Ranch to return to advertisers good big certified checks which they had sent him to pay for advertisements in advance. He (the manager) could not endorse those who wish to do business with the readers of his paper; neither could he recommend what they had to offer the public. He therefore returned their advertisements and their money. It is this policy that has made Texas Farm and Ranch what it is to-day, namely: A thoroughly reliable paper—one that the people can depend on.

As to the cost of stacking the green sorghum: Yes, 10 cents per ton does look cheap, but its a fact just the same. The cost per acre from start to finish, will sum from \$1 to \$1.25 per acre. The yield per acre of green sorghum, or Kafir corn, in this country, will run from ten to fifteen tons per acre, or we may say, it will average twelve tons per acre.

As I don't own Texas Farm and Ranch, or any part of it, except the copy I subscribe and pay for, my space in it is limited. Were it not for this and the further fact that others want to be heard on this sorghum and other important subjects, I would try and answer all the letters and questions asked. Those interested should read the letter signed W. C. B., Elmwood, Tenn., in last week's Texas Farm and Ranch, on pages 12 and 13. W. C. B. handles and puts up his sorghum in about the same way as does Mr. T. B. Jones, of that section, who put up 500 acres of green sorghum last year, and fed 2600 head of cattle on it. W. C. B. should have used the word shock instead of stack. I gave the experience of Mr. Jones with green sorghum for stock in my letter of last week in Texas Farm and Ranch. Those interested would do well to secure a copy of a book entitled "Silos, Silage and Stock Feeding," from Texas Farm and Ranch, and will say, however, that the early amber is considered the best sorghum seed for this section. For feed, sow broad cast; for seed or syrup, drill. Plant or sow any time after the danger of frost is over. If shocked up, a ton or so to the shock; if stacked, not less than 20 tons to the stack. Stack or shock direct from the mower or reaper, green. Harvest any time after the seed of the cane is in milk. If rain should come during stacking it don't affect or hurt it in the least. If stacked, sprinkle the outside edge of the stack for a foot or two with salt water. The sorghum or Kafir corn being green, it naturally packs closely; all air is shut out. This is the secret of success. If shocked, the cane cures green and makes excellent feed; but I doubt if in this way you retain as much of the strength and satcharine matter as when stacked. Either is good and much better than curing on the ground, as we do hay. In this way the best of the feed is burnt up and goes up in the air instead of being preserved for the stock.

Wichita Falls, Texas.

THE COW PEA.

The following is a summary from Stubb's Bulletin, on the cow pea, Louisiana Experiment Station:

1. The origin of the cow pea was doubtless India, where to-day many related species are grown.
2. All the varieties of the cow pea now cultivated in the United States are believed to have originated from one ancestor, "Vigna sinensis," and

WHAT IS BRIGHTER, more attractive, than the homestead painted white, with green blinds? It may not suit the critic, but we like it and it will please the owner. Painted with

Pure White Lead

and Pure Linseed Oil, it will look fresh and clean longer than anything else; if properly applied, it will not scale, chip, or chalk off, but forms a perfect base for subsequent repainting; is therefore economical.

To be sure of getting Pure White Lead, examine the brand (see list of genuine brands). Any shade of color desired can be easily obtained by using NATIONAL LEAD Co.'s brands of Pure White Lead and Tinting Colors.

Pamphlet giving valuable information and card showing samples of colors free; also cards showing pictures of twelve houses of different designs painted in various styles or combinations of shades forwarded upon application to those intending to paint.

NATIONAL LEAD CO.,

1 Broadway, New York.

SOUTH DOWNS. C. M. CLAY, White Hall, Ky.

SPRINGSIDE JERSEY FARM.

A. J. C. C. Jersey cattle for sale. Also English Berkshire swine. W. A. PONDER, Denton, Texas.

A. W. HILLIARD, Kyle, Texas.

Blanco herd A. J. C. Jerseys. Prices reasonable. Write for what you want.

Wm. FOLSETTER, V. S.

Office: 240 Main St., Dallas, Texas.

Can be consulted on all diseases of domestic animals.

REGISTERED ESSEX SWINE.

My herd consists of best strains that could be bought in Illinois, Ohio and other Eastern States, being the direct offspring of leading World's Fair prize winners. Can furnish true, thrifty pigs not related. The Essex is the hog for the South.

MILLARD STOREY, Dallas, Texas.

EASTERN SWINE HERD. Minden Prince 2774, out of Princess 2480, by Prince Imperial 2389, for sale or exchange. He is 4 years old, excellent breeder and very large. Also 1 year old Berkshire boar and a full P. C. boar that is extra good. Write for description and prices. Spring pigs of Berks and P. C's will soon be ready for shipping. Will exchange above boars for sows, Jersey cows or good nags.

J. A. H. WELCH & SON, Minden, Texas.

NO FLIES, VERMIN OR SORES ON HORSE OR CATTLE.

SHOO-FLY.

The ORIGINAL STOCK PROTECTOR 1886. Thousands of testimonials from thirty-seven States. If your dealer offers a substitute, send 50 cts. and our agent in your State will express one quart \$1.50 per gallon. 1 gallon lasts 12 months on a horse. SHOO-FLY MFG. CO., 1005 Fairmont Ave., Phila., Pa.



WHINERY'S CHESTERS
IMPROVED
Are very Growthy, Prolific, Easy Feeders. Go to every State, Canada and Mexico. \$20 sold in 1896, over 1000 for 1898. Catalogue free.
"Whinery's Swine Advocate"
A 16 page monthly 25c per year.
Willis Whinery, Salem, Ohio.

Turkey Creek

—HEED OF—
Poland-China Swine

Choose stock for sale in pairs and trios not akin. Correspondence solicited. Satisfaction guaranteed.

Last Look, Jr., No. 11188 C. It., at head of herd. G. E. KING, Taylor, Texas.

CEDAR VALE HERD POLAND CHINA SWINE.

One bred, the best of the breed, and the best bred for the South. All ages, pairs and trios not related. Boars in service, Double Wilkes, Honest Dave C., Merritt Wilkes, and Shade Park Victor, combining blood of all the leading strains. H. E. SINGLETON, PROPRIETOR, Lebanon, Collin County, Texas.

PURE BRED BULLS

JERSEY, HOLSTEIN.

The A. & M. College has on hand some surplus home raised bulls that are to be sold at low prices. All stock sold under guarantee. For description and prices write

J. H. CONNELL, Prof. of Agriculture, P. O., College Station, Brazos Co., Texas.



Devoted to the interests of Home Builders,
and Published Weekly,
BY

Texas Farm and Ranch Publishing Company.

SUBSCRIPTION RATES

One Copy One Year..... \$100

ADVERTISING RATES.

Display advertisements are charged for at the rate of THIRTY CENTS per agate line, each insertion. Fourteen solid agate lines make one inch. Special position 20 per cent extra. Discounts on large space. No advertisements inserted for less than one dollar each insertion.

J. C. BUSH, Special Eastern Representative,
47 Times Building, New York, N. Y.
CHICAGO OFFICE: 1511 Marquette Building.

Address all communications to
Texas Farm and Ranch Publishing Company,
345 Main Street, Dallas, Texas.

Entered at the Post-Office, Dallas, Texas, as
Second Class Matter.

NOTICE!

No one has authority to contract debts, receipt for money, or enter into any contracts for this company, unless they can show written authority for doing same, signed by the President or Secretary.

We do not accept drafts or orders made on us by canvassers, agents or employees.

TEXAS FARM AND RANCH PUBLISHING CO.,
FRANK P. HOLLAND, President.

In making remittances to Texas Farm and Ranch for subscriptions and premiums, always buy a Post-Office Money Order. Express Order, or send by Registered Letter, if either of the above orders cannot be obtained. Money sent in ordinary letter, cannot be recovered if lost or mis-carried.

In ordering the paper changed from one post-office to another, subscribers should always give the name of the old as well as the new post-office.

TEXAS FARM AND RANCH is the official medium of the organizations, given below:
State Horticultural Society—J. S. KERR, President, Sherman; E. L. HUFFMAN, Secretary, Fort Worth.

State Swine Breeders' Association—H. E. SINGLETON, President, Lebanon, Collin Co.; A. A. FRYKOPF, Secretary, Dallas.

Texas Trotting and Pacing Horse Breeders' Association—W. M. G. HILL, President, Dallas; S. B. HOPKINS, Secretary, Dallas.

Texas Jersey Cattle Club—J. D. RUDN, President, Waskom; W. R. SPANN, Secretary, Dallas.

State Farmers Institutes—E. F. BUTLER, Organizer, Waxahachie.

New Mexico and Arizona are denied admittance as states, on the ground that their admission would add two more silver votes to the senate. Thus senators do not hesitate to declare that justice must wait on party expediency.

Easter is the first Sunday after the first full moon on, or next after the 21st of March. It may occur as early as March 22nd, and as late as April 25th, or on any day between these dates. It has not occurred on March 24th for one hundred years.

A carload of onions were shipped to Fort Worth last week from Ogden, Utah. As the freight bill amounted to more than the goods were worth, the consignee refused to take them out. Therefore the onions were sold and the shippers presented with a bill for the balance of charges.

A public man, whose name shall be "mud," as far as we are concerned, has spoken and published a high sounding eulogy on our present American congress, and expresses his full confidence that it will succeed in saving the country. Verily that man possesses a credulity that would repose confidence in the statements of Eli Perkins or Tom Ochiltree.

The senate of the U. S. has adopted a joint resolution authorizing ex-President Harrison to be decorated by Spain and Brazil. As the ex-president, undecorated, is rather a plain looking citizen, there can be no reasonable objection why he should not be ornamented by any person or power which may feel an interest in his personal appearance. But why government action should be required, is beyond the ability of Texas Farm and Ranch to divine.

To the unsophisticated citizen it would seem that Mr. Harrison, in the exercise of his rights as an American citizen, and the husband of his wife, was at full liberty to accept or reject decorations, ornamentation, or flummery of any sort from any source.

The abundance and cheapness of pork may not be a good thing for pork raisers, but it is good for pork eaters. The poorest man in all the country can treat his appetite with ham at least once every day; and the cheapness of eggs enables him to add the balance of the popular dish that is said to adhere to the ribs when carbohydrates and protein in other forms pass away, leaving scarcely a trace behind. To a resident of this country of fatness in everything necessary to comfortable sustenance, it seems like fiction to read of wide-spread scarcity, and even famine in less favored lands. Then let us be thankful that while prices are low plenty prevails, and when prices are high there is still an abundance for all and some to spare for the needy of other lands.

After an enormous display of oratory thickly spread over many weeks, and at an expense of \$200,000 to the tax payers of the country, congress has succeeded in expressing the opinion that the Cuban revolutionists ought to be recognized as belligerents. A large majority in both houses had previously, loudly and continually expressed that opinion as individuals, but the thing desired was for them all to express themselves at once, so that the reverberation would be louder but not so long continued. This may have been merely a whim of congressmen, but the people can now consider what congressional whims cost. The Cuban resolutions have been passed, and there the matter ends—they will have no more effect than the explosion of a may-pop.

Competition is said to be the life of trade. But one would not have to travel far to find cases where trade has been killed outright by competition. Competition drives small business to the wall, then pins its ears back and swallows it whole. The tendency of competition is to drive many out of business for the benefit of a fortunate few. A great dry goods house within 1000 miles of Dallas, looked with covetous interest at the many small dealers in confectionaries, and ordered several carloads from first hands, and of course could sell at a lower figure and make larger profits than the smaller dealers. This stroke of competition drove a number of honest men out of business and seriously crippled all of them and injured directly several hundred people. Competition often works just that way.

Politicians and political papers are congratulating themselves and all concerned that political contests are now carried on without the mud-slinging which once prevailed. Whether this is because the mud gave out, or whether masked batteries were found to be more effective than parked artillery, may well be questioned. That the politician has not reformed may be assumed from the fact that when he gets office he runs it for all it is worth to him, regardless of the wishes or the welfare of the people. Take the present congress for a "terrible example," and see "what tangled webs they weave when first they practice to deceive." When the leopard can change his spots or the zebra his stripes, the politician may change his principles. His aim is to get there. If he abandons the "mud-slinging" road, it is because he has found a better and shorter route to the goal of his ambition—office, and the spoils thereof.

STILL ANOTHER PRECEDENT.

The U. S. circuit court for Minnesota has decided that a state has no power or authority to protect itself against adulterated food or drugs, if said articles come in from another state. The court says: "The sale of an article imported from another state is a part of interstate commerce, and may not be prohibited or burdened by the legislatures of the states." Thus, one by one the reserved rights of the states and the people thereof are usurped by the general government through federal courts, and the ease and sangfroid with which it is done is almost enough to take the breath of one who has been nurtured in the faith that the people were the highest authority in the country, and that all rights not delegated to the federal government by the plain words of the constitution were reserved to the people and the states. Here is another sample of judicial wisdom from the same decision: "Putrid, diseased or dangerous articles of food do not belong to commerce and hence the power to regulate them was not granted to congress; but every article that does belong to commerce, every sound commercial article, is so far as interstate commerce is concerned, subject to regulation by the state or congress."

Minnesota passed a law requiring manufacturers of baking powders in which alum was used to label them as containing alum, and the manufacturers applied to the federal court for the decision mentioned, and got it. Under this decision the people, through their state authorities, cannot protect themselves against any character of food or drugs unless the articles be putrescent. This subject is mentioned simply to inform the people of the beauty and symmetry of our laws—not as made, but as expounded from the bench.

The representatives of twenty-one of the largest producers of Bessemer steel in the United States met in New York one day last week to compare notes and decide upon the gross amount of tax they must levy upon the people of the country to make their business satisfactory. The amount decided upon has not been made public, but the public will be made to pay it. This is a huge Bessemer steal.

Many farmers hold their produce for better prices. Better prices prevail when produce is scarce on account of bad roads between the farms and the market. When these conditions occur the farmer is fortunate who lives on or near a good road, for then he can take time by the forelock, and rush to market, while his less fortunate fellow-sufferers are mud-bound, and compelled to wait until dry weather hardens the mud so that they can all market the same day, or week, and thus get the advantage of a glutted market and low prices. They have the thin consolation that if they can't sell, they have a good hard road over which to haul their produce back home.

If the present congress has passed a single bill for the benefit of the people, even in the remotest degree, we would like to have our attention called to it. The only measure they are likely to pass that will be for the public good will be the resolution of adjournment. Every measure that has been entertained or discussed has had for its object political plunder, or official boodle. Senators and representatives vote for each others pet schemes, if thereby they can get help for schemes of their own. Policy and not principle seems to dominate in legislative halls, and members are alert only to see that their opponents do not put through and get credit for

some salutary law. And political parties are so divided that a majority can always be marshalled in opposition to any measure for the benefit of the people. These conditions are patent to all readers of the daily papers. Will there be any improvement? Not until the people refuse to be led around by the nose, in the wake of political bosses, and vote for men rather than for parties.

The committee on elections of the United States senate has reported and recommended a constitutional amendment, providing for the election of senators by direct vote of the people. This report is in response to an almost universal demand of the people. The scandalous methods by which senators are charged with securing their seats, and their no less scandalous methods afterwards, has emphasized the demand for a reform which shall make this body more nearly representative of the will of the people. It will be more difficult to purchase a majority of the votes of a state than a majority of a legislative caucus. But the amendment is too salutary a reform to receive favorable action by the senate.

The Dallas County Grand Jury seems to be surprised that the court of criminal appeals, in reversing a conviction, never take into consideration the question of guilt or innocence of the appellant. That is not what the court of appeals is there for. It is to be presumed from the course of events that the sole object of having a court of criminal appeals is to see if the convicted party has been put through the circumlocutionary proceedings of the trial court without varying from the traditions of the legal fathers; otherwise he must have a new shuffle, cut and deal; and then another, and so on until all the sharp edge of the case is worn off; and the courts and witnesses (if they have not left the country on account of the case) have become tired of the whole thing, and dropped it.

By common consent the increased net earnings of the railroads is taken as a proof of the nation's prosperity. The fact is a proof of the prosperity of the railroads only. It is even an indication of a lack of prosperity on the part of those who produce the freights. Among the things this railroad prosperity shows is that our farmers produced enormous crops last year, of which the railroad companies got much the larger share. When the highwayman robs a traveler of a large sum of money, it is no indication of the unfortunate man's wealth. It simply makes that wealth manifest by causing it to change hands. Railroad charges do not fluctuate like the prices of products and when the entire value is consumed by those charges the railroads prosper, while the producer foots the bill.

Several parties have written about saving bacon. The following will make yellow, rancid bacon white and sweet: Take one pound of salt, petar well pulverized to 1000 pounds of meat, then cover with a thin layer of either white or brown sugar, then cover thoroughly with salt; take charcoal and break into lumps from the size of a marble to small hen eggs and place a thin layer on the salt. The charcoal should be dusted to keep from making the meat black. Fix each layer of meat as above, putting bones in one end of the box so you can get out either bones or sides without disturbing the other, and your meat will keep sweet and nice all summer and fall if kept dry. The sugar adds a flavor you can't get any other way. The sooner you pack the meat down now the better.—Barcus, Coupland, Texas.

A. J. Hart sends us \$1 to renew subscription, but fails to give P. O. address.

much. Do you like to hear the banjo? Come again, Cousin Albert, I think you are just right about whiskey. I think you write such nice letters. Love to Aunt Sallie and the Cousins.—Clara Gray, Hopson, Kentucky.

(I like the banjo and the guitar both very much, Clara. The banjo has become very popular in recent years. Doubtless you are very lonely.—Aunt Sallie.)

Dear Aunt Sallie and Cousins: Will you let a little girl join your happy band of boys and girls? I have been a reader of the League for a long time and never wrote but once before, and then it was condensed, and I felt so sorry when I did not see it in full. I am going to school now. I have two pets—a colt and a cat. My colt's name is Maggie.—Rose Gibson, Crosby, Harris county, Texas.

(You shall have the pleasure of seeing your entire letter this time, Rose. There are so many Cousins waiting I am compelled to condense to give all an opportunity.—Aunt Sallie.)

JOHNNIE CHAFFIE'S LETTER.

Written for Texas Farm and Ranch by Alex E. Sweet.

Ma was very much tickled when she saw my letter in last issue of Texas Farm and Ranch, but pa wasn't. He said that it might be the first downward step toward becoming a journalist.

"Wouldn't you be proud of our John-



nie, if he were to grow up and become a great journalist like James Gordon Bennett?" asked ma.

"No," said pa, with a large sneer. "I would prefer to have my son engage in a legitimate business, and then everybody would respect him."

"Henry," said ma glaring at him, "you talk like a fool. I am happy to see Johnnie correspond with Texas Farm and Ranch."

"You are happy, Jane, to see his correspondence, but the readers of the Farm and Ranch are correspondingly unhappy. I am surprised at such stuff being published. The editor must have been away," and then pa laughed fiendishly.

"Don't you sit there grinning like a county poor-house idiot," said pa.

Then pa got mad and they didn't speak for two days. Once pa sent a communication to a paper about the danger of monopolies, and the editor sent it back because it was not available, and pa has been bitter ever since.

This spring pa concluded he would have a garden of his own and head off the grocery man, who has been robbing him, so he said. I had to laugh when he started out to spade up the garden. He turned up about ten quarts of fishing worms and he had all the neighbors following him around with empty tomato cans and looks of expectancy. He also turned up about ten thousand beef bones with eyelet holes in them, five horn-handled rusty table knives, thirty-seven old suspender buckles, and he even had the luck to strike a piece of old rag carpet.

Pa believed that he could lay out a garden to suit the taste of the most fastidious, but, when pa had got it to suit him, the neighbor's fresh hens took a hand at it. They seemed to think that they knew as much about laying out a garden as they do about laying eggs, and every once in a while you could see a bare-headed man following a hen through the gate and filling the air with profanity and garden implements. That was pa. He laid out several hens that were laying out our garden, and now the neighbors don't send over any more to borrow a cupful of parched coffee and our copy of Texas Farm and Ranch.

Pa says now that the city is not as good a place to raise vegetables as the country; that beats are the only crop

that grows wells in the city, although he knows some young men in Dallas who have become experts in sowing wild oats, which don't depend on the weather, and thrive better under the electric lights than in the sunshine.

Ma wants to keep a cow so we can raise our own buttermilk, but pa objects. He says he knew a man in Southwestern Texas to get into a peck of trouble by keeping a cow, but, when ma cross-examined him, he had to own up that it was a neighbor's cow the man kept.

"I reckon, Henry," said ma, "he must have been one of your relatives. They are an awfully shabby lot."

That caused a coolness between ma and pa.

Pa had to own up that as a promulgator of garden sass he is an utter failure, and ma sees to it that he don't forget it. She says that he is pretty good at giving advice about gardening, but when it comes to irrigating his marrow fat peas he had better pass his hand over to his partner to play. All that he has succeeded in getting out of his gardening is a dull pain in his back and an assortment of corns and bunions on the inside of his hands.

Grandma loves me more than pa does. That's why I am kind to grandma, and read items to her out of the papers. I mix them up a little so they will be more interesting. A few days ago she wanted to know what was going on in the world of fashion, so I took a paper and read the market reports to her.

"Johnnie," said she, "will you read a little to me?"

"Certainly, grandma, I love to read to you," and then I read as follows:

"The crockery market is very dull just now. There is a demand for cuspidors and decanters, but hopes are entertained that Corbett and Fitzsimmons will meet in some saloon, and then there will be more demand. In consequence of local option law in some Texas towns, however, there is a demand for pocket flasks and demijohns. Grapes, particularly sour ones, are still very high. The supply of concord is not equal to the demand in political circles. There was great activity in wool at Austin while the republican convention was in session, particularly the darker grades. Owing to this being a presidential year, lively times are expected in soap and sugar."

Grandma thanked me and gave me a dime to put in the plate next Sunday.

Charming * Music

JUST PUBLISHED.

The Columbia College Song Book.

An excellent collection of the latest college songs and glees, as sung by the Glee Club and students of Columbia College, New York city. All the charms which have made the success of preceding volumes of college songs possible are to be found in this collection. Handsomely printed, with cover in blue and white. Price, \$1.00, postpaid.

"College Songs for Girls."

52 songs; 118 pages. The only collection of the kind published, containing all the cleverest and prettiest songs sung in American women's colleges. A fascinating book. Paper, \$1.00.

"College Songs."

Most popular collection ever published. Over 300,000 sold. Heavy paper, 50 cents; cloth, gilt, \$1.00.

"Good Old Songs."

Vol. II.
A treasure book of over 100 songs which have been loved by several generations. Piano (or organ) accompaniment. Heavy paper, \$1.00; boards, \$1.25; cloth, gilt, \$2.00.

"Royal Four-Hand Collection."

Thirty-eight charming piano duets from the best modern sources. Easy, bright, and with abundance of variety. Handsome covers, 50 cents.

"Royal Collection Reed Organ Music."

Fifty-seven of the most pleasing and excellent examples of recent music for the parlor organ—waltzes, marches, operatic selections, etc. Handsome covers, 50 cents.

"Favorite Collection of Waltzes."

48 waltzes, new and old, which several generations have played, or danced to, or been fond of. 100 pages. 50 cents.

"Selected Classics for the Pianoforte."

This is the latest collection in the famous "Classic" Series. It contains thirty-two charming pieces from the best recent sources. An invaluable book for the cultivated player. Paper, \$1.00; boards, \$1.25; cloth, gilt, \$2.00.

"War Songs."

Containing all the great war songs of the American nation. The most complete and popular book of the kind published. Heavy paper, 50 cents; cloth, gilt, \$1.00.

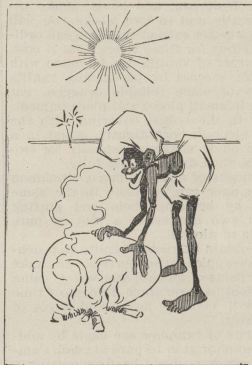
Any Book Sent Postpaid on Receipt of Price.

Oliver Ditson Company,
453-463 Washington St., Boston.

AN EASTER MISHAP.



—1—



—2—



—3—



—4—

Little Mamie read on her Sunday-school card: "God makes preserves and keeps us." Looking up, suddenly, she said: "Mamma, what do you s'pose He does with 'em all?" "With what, my dear?" "Why, all those preserves."

"Blight"

costs cotton planters more than five million dollars annually. This is an enormous waste, and can be prevented. Practical experiments at Alabama Experiment Station show conclusively that the use of

"Kainit"

will prevent that dreaded plant disease.

Our pamphlets are not advertising circulars boasting special fertilizers, but are practical works, containing the results of latest experiments in this line. Every cotton farmer should have a copy. They are sent free for the asking.

GERMAN KALI WORKS,
93 Nassau St., New York.

"Josias," said Cornstassel's wife, "the roof's aleakin' agin'."
"Is it?" replied Mr. Cornstassel. "Well, I'll investigate it to-morrow."
"Josias, I dont read papers fur nothin'." The roof dont need investigatin'. It needs attendin' to."—San Jose Report.

SPRAY PUMPS.
EXPANSIVE DOUBLE THOUSANDS, BUCKETS, ACTING IN USE.
Largest Pump and Hay Tool Works in the U. S.
CATALOGUE FREE.
Write for Particulars, Prices, etc. Ask your dealer for
F. E. MYERS & BRO. Ashland, O. *Myers' Pump*

"I am in a tight place."
"What's the matter?"
"I've got to raise \$99 by 3 o'clock to-morrow."
"Why do you require precisely \$99?"
"I have to pay a hundred-dollar note in the bank, and I've got the other dollar."—Texas Siftings.

AMERICAN Bee Journal
Established in 1861.
The leading paper, and only weekly; 16 large pages, 5 late but diff. copies free as samples. Write to-day.
G. W. YORK & Co., 119 Mich. St., CHICAGO, ILL.

Adolphus (in Miss Emily's private sitting room)—Emily, I cannot find expression for the feelings which agitate my heart—I love you! (Dropping on his knees.) Behold me lying here in the dust before you!
Emily—Beg your pardon, Adolphus. That is an insult. I dusted everything myself only ten minutes ago.—Tit-Bits.

\$12.50 FOR A
to weave your fence at
25 Cts. per Rod.
10 No. 10 Gal. wires. Cross
wires No. 12. We will
sell wire for a 100 rod
fence for \$20. Agents
Wanted. Catalogue Free.
CABLES
Wire Fence Mach. Co.
Box 76, Mt. Sterling, O.

"Ah, ha!"
Adam smiled significantly.
"This morning we had morning. At 12 we had noon. What is bound to come at the close of the sixth day?"
He gazed at the setting sun.
"Why, Eve, of course."
The feeling stole o'er him that one of his ribs might be spare-rib.—Pick-Me-Up.



WE DIVIDE THE WORLD
into three classes. Those who **will** have the best. Those who **want** the best, and those who don't care so it's **cheap**. The first always buy Page fence, the second **most** always, and the third buy one of the many substitutes.
PAGE WOVEN WIRE FENCE CO., Adrian, Mich.
J. R. KEENEY, Gen'l Agent, Dallas, Tex.

Poultry

Every rooster should have his spurs clipped. The reason for this is obvious.

Close quarters with good care will beat neglect and all out of doors for a run.

Several of the state experiment stations have established poultry departments, for the purpose of educating the people on breeds and methods.

The Reliable Poultry Journal says: "Too much is written for the poultry journals that isn't so." The above quotation is not in the black category, for it is so.

When plowing the garden open wide the peary gates and let the chickens in. If there is any tempting garden truck exposed, it will be safe while the plow is turning up bugs and worms. This will help both garden and fowls.

Hawks catch many exposed chickens; but they also take in out of the wet a great number of field mice, gophers, etc. Don't judge the hawk too harshly. Properly regarded, he has a place in nature, and the world is better off if he has man's permission to work out his destiny without the aid of a shotgun.

Wallace, the poultry editor and author says: "The Plymouth Rock is said to have originated from a cross between a Dominick cock and a Java hen." Fact is, no one knows the origin of this popular fowl. Perhaps they never had an origin—just developed in the hands of breeders from gross inferiority to what we find them to-day.

The question of stimulating laying hens with red pepper is a bad one. It is damaging to the entire digestive apparatus, and will shorten the life of a fowl by one half. There is but one animal known that can withstand the irritating effects of this violent irritant for any considerable length of time, and that is the Mexican greaser.

In timbered sections fowls are subject to depredations by hawks, owls, coons, possums, snakes, minks and other prowlers and thieves by day and night. The loss from these causes has never been reliably figured out, but in the aggregate it is enormous. In such cases eternal vigilance, a good dog, a shotgun and strichnine are means to be used judiciously, but without intermission, remission or omission.

POULTRY TALKS.

IDA KAYS.

We are pleased to notice the growing interest manifested in poultry matters. No agricultural paper is complete without its poultry department, and writers of note are turning their attention to so small an affair as the barnyard fowl.

An exchange of ideas is always beneficial and we must learn something from another's experience, if nothing more than an error to avoid. We get a great deal of valuable instruction, too, yet it sometimes seems as if the tendency of these poultry talks is to promote the interest of the fancier and manufacturer.

We have no doubt that each one of the popular breeds of poultry possesses individual merit; have no doubt that there is profit in artificial incubation; but where one receives a satisfactory return for money invested in fancy poultry many do not; where one succeeds with an incubator many fail.

We do not pretend to say whether the fault lies with the fowls and machinery, or with the owner and operator.

Neither do we deny that there is in our own yard the prettiest brood of the choicest thoroughbreds, nor that we anticipate owning an incubator and its belongings some time in the future, yet facts remain the same, and we may be among the many who fail.

It is always interesting to read of improved poultry, improved methods and new machinery, but nine out of ten who read will never own anything but mixed fowls, will never see a \$90 incubator, or a \$15 brooder or a \$12 bone cutter.

These are all very well for those who can afford experimental investments, but never would the average poultry raiser make them pay.

Every farm must have its fowls and we must not lose sight of the fact that the common scrub hen will "rus-

tle" for a living and lay a quantity of the choicest eggs; she will sit upon a baker's dozen of them for twenty-one days and hatch a dozen lusty chicks; she will cluck to her brood and scratch bugs for them in the good old-fashioned way, despite all this machinery lore; the chicks will thrive and grow without patent food and ground bone, just as they always have done; and they will be just as palatable on the table as if their ancestors had cost \$10 per trio.

Let us talk more about preventing the diseases that do not spare the bluest blood; ridding our poultry houses of the vermin that prey upon the aristocrat and plebeian alike.

Let us talk of pure water, wholesome food, convenient feed coops and clean houses; and discuss ways and means to make the common farm flock reach a maximum profit with minimum expense and care.

Then shall we common poultry folks be benighted.

Kelly, Kansas.

REMINDERS.

The following suggestions are found in the English Fanciers' Gazette:

Always carefully look over your flock once a day, and if you see any birds mopy or drooping their wings, remove them then and there, as one ill bird may affect all the rest.

Always keep some Epsom salts and sweet oil by you, as you may want them at any moment.

Always give just enough food on one time that it will all be eaten up; none should be left lying around.

Always give as great a variety of food as possible; constant change of diet is the way to get the chickens on.

Always give your birds a little heat, seed and cooked meat when moulting.

Always keep the floors of the houses and coops well covered with sand or ashes.

Always rake the droppings off every morning. Cleanliness is a great preventive of sickness.

Always keep a sharp look-out for vermin, and eradicate them as quickly as possible.

Always do little odd jobs that want doing at once. "Procrastination is the thief of time," and often a nail here or a tack there will save an hour's work.

Always buy your food in as large quantity as possible, as you will then generally be able to get it at a cheaper rate.

Always keep a strict account of all you buy or sell. By treating your hobby in a thoroughly business way, you will derive greater pleasure by seeing exactly how much profit you have earned.

Always be particular when writing a description of what you have to sell to an intending purchaser; this often saves a lot of unpleasantness.

Always remember that promptness in replying to letters is the way to secure customers.

Always bear in mind that by continually advertising you bring your name before the public, and thereby build up a substantial business.

POULTRY AND PROFIT.

Exchange.

On a farm where there is ample range, poultry should include not only hens, but turkeys, geese, ducks, and even guineas. The turkeys and guineas are disposed to wander over large areas, while geese and ducks will thrive on a small pasture lot. It must not be overlooked that the largest proportion of meat sold off the farm, in the shape of turkeys, geese and ducks, costs the farmer little or nothing, and if some knowledge could be gained of the actual cost, it would be shown that the receipts are nearly all profit, and this should encourage farmers to increase their stocks. The hens pay best as producers of eggs, and ducks are also excellent layers, but the largest profits in poultry are secured from turkeys and geese, as they can support themselves the larger portion of the year unaided.

While it must be admitted, however, that whatever is consumed by poultry really comes from the farm, whether the birds secure it or receive it, the profit will not appear so large, but the fact is, that turkeys are insect-destroying birds, and the larger share of their food is composed of insects and seeds, while geese are partial to young and tender weeds, purslane being one of its delicacies. These different kinds of poultry utilize material that would be of no service to the farmer at all, and in that respect they serve as valuable scavengers not only to keep down many pests that annoy the farmer, but also enable him to send the unde-

We'll Give You

A RAZOR

Guaranteed to be best quality steel.

If you send us { 60 Coupons, or 2 Coupons and 60 cents.

OR,

WE WILL SEND A 3-BLADE PENKNIFE

also guaranteed to be best quality steel, For { 50 Coupons, or 2 Coupons and 50 cents.

You will find one coupon inside each 2 ounce bag, and two coupons inside each 4 ounce bag of

BLACKWELL'S GENUINE DURHAM TOBACCO.

SEND COUPONS WITH NAME AND ADDRESS TO

Blackwell's Durham Tobacco Co., Durham, N. C.

Buy a bag of this Celebrated Smoking Tobacco, and read the coupon, which gives a list of other premiums and how to get them.

2 CENT STAMPS ACCEPTED.

sirable substance to the market in the form of meat.

The most successful farmers met by us, with poultry, were those who did not confine themselves to one kind. They not only had large flocks of hens, but also found room somewhere for turkeys, geese, ducks and guineas, the latter being intended for home use, as they are of but little demand in market. They look upon a variety as better enabling them to produce the most at the least cost, and they were particular to use good breeds as well. No enterprising poultryman will attempt to make poultry pay unless he uses the pure breeds. There is a wonderful Bronze turkey, Embden Goose and Pekin duck as compared with the common breeds, as the weight is also a very important matter in assisting to derive a profit on meat. It costs no more to keep the best to be had than to give up the space to those which are inferior. Quality brings the best prices, but feed will not give quality unless the breed is used to utilize the food to the best advantage. There is nothing to prevent every farmer from making a profit on poultry, and the way to do so is to take advantage of every method for so doing, using all varieties of poultry for that purpose.

POULTRY A CHEAP LUXURY.

Western Agriculturist.

Just why poultry should be regarded as one of the luxuries to be observed for special occasions in so many farmers' families it would be rather hard to decide. A pound of poultry, according to the Farmers' Magazine, can be produced by the farmer as cheaply as a pound of beef, mutton or pork, and there is no good reason why poultry should not be found very often on the farmers' table. It is just as profitable to eat the poultry and sell the pork, and a great deal more wholesome, for as a nation, we eat entirely too much pork for the general good. The most of the pork eaten is principally fat, and this does not add to the health or strength of the consumer nearly as much as the consumption of an equal amount of poultry would. With a supply of chickens, ducks, turkeys and geese, the farmer could have a variety in the way of meat food that makes it possible for the cook to add much to the attraction of the table. Pork is hard to digest and this makes it so much the more unfit for use when hard work is pushing the farmer, for all the energy uselessly wasted in digesting food is lost in the amount of work one is able to perform. Poultry of all kinds is easily digested and has less tendency to create heat than fat pork, and the farmer who has care for the health of his family will use more poultry than pork.

"BROWN'S BRONCHIAL TROCHES" will quickly relieve Bronchitis, Asthma, Catarrh and Throat Diseases. Sold only in boxes.

The drugs in Dr. Simmon's Sarsaparilla is so concentrated that the dose is very small, but nevertheless, it is so scientifically combined that it is readily retained and assimilated by the most delicate and sensitive stomachs, 50 cents and 50 doses.

Single Comb Brown Leghorns exclusively. Eggs from prize winning birds, \$1.50 per sitting. Satisfaction guaranteed. Address Jno. E. Keller, Austin, Tex.

GUARANTEED Pure Bred S. C. Brown Leghorn Chickens only. Eggs at reduced price. GEO. A. MEYER, Proprietor, Muenster, Tex.

EGGS FOR SALE. Black Langshans exclusively. \$2.00 per 18. H. J. MAESTYN, 301 Main Street, Dallas, Texas.

E. A. SCHULER, Keachi, La., Breeder of Brown Leghorns, Barred P. Rocks, Buff Cochins, Black Langshans, Registered Berkshire, Canaries. All of best blood.

Uncle Snort's Poultry Yards.

Two pens extra fine Black Langshans, one pen White Langshans, one pen Brown Leghorns. Eggs \$1.50, per sitting. White Langshans \$2.00 per sitting. Address UNCLE SNORT, Waxahachie, Texas.

THOROUGHBRED Wyandottes and Barred BIRDS.

Plymouth Rocks. Eggs for hatching, 14 for \$1.50; 42 for \$4. Send orders to A. M. RAGLAND, Pilot Point, Texas.

R. A. DAVIS, Merit, Texas.

Breeder of Light Brahmas, Blue and Pr. Cochins, Black Langshans, S. Wyandottes, B. and W. P. Rocks, White Crested Black Polish, Brown Leghorns, S. S. Hamburgs, Indian Games. Satisfaction guaranteed. Correspondence solicited.

GREIDER'S NEW CATALOGUE

FOR 1896. Clear and larger than ever, the finest engravings of poultry, with descriptions of each variety, best plans for poultry houses, how to raise broilers, caring of fowls, remedies for all diseases, best food for poultry, prices of eggs and stock from high scoring birds, and 10 cents for this noted book which will be deducted from first order. Address: B. H. GREER, RICH, Pa., U. S. A.

Fresh. Eggs. Fertile.

Best brown and White Leghorn, \$1.25; Barred and White Plymouth Rocks, Black Minorcas and Pekin ducks, \$1.50; Buff Cochins, Black Langshan, Light Brahma, Pitt game and S. L. Wyandotte, 12 for \$3. Catalogue Free.

Address H. B. GEER, Nashville, Tenn., or GEER BROS., St. Mary's, Mo.

HATCH Chickens BY STEAM.

EXCELSIOR Incubator. Simple, Perfect, Self-Regulating. Thousands in successful operation. Lowest priced first-class Hatcher made. GEO. H. STAHN, 114 to 122 S. 6th St., Quincy, Ill.

INCUBATORS.

Our 100 page, finely illustrated Combined Poultry Guide and Catalogue will tell you what you wish to know about PROFITS IN POULTRY.

We manufacture a complete line of Incubators, Brooders and Poultry Appliances. Guide and Catalogue (10c. stamps or silver). Write One Dollar for Reliable Incubator & Brooder Co., Quincy, Ill.

SUCCESSFUL INCUBATOR

Our magnificent new catalogue giving full information regarding articles, hatching & brooding and treating on poultry raising sent for to Incubator Co., Chicago, Ill.

The mendicant stood before the wayfarer with outstretched hand. "Please, sir," he said, "I have seen better days." "Well, that's no affair of mine," said the wayfarer. "Make your kick to the weather man if you don't like this kind of a day.—Texas Sittings.

A TEXAS MARKET FOR TEXAS STOCK.

It is indeed very gratifying to those who have identified themselves with the increased production of hogs in the state of Texas to see their efforts in that direction bringing about good results. It is now demonstrated beyond a shadow of a doubt that hogs can be raised profitably in the state of Texas, and the continued increase of production is beyond question agreed upon by the stock raisers and farmers of Texas. On the other hand it must be very gratifying to the people of Texas, who have raised and matured hogs for market, to recognize that since November 15th, 1895, there has been paid into the pockets of the people of Texas about \$700,000, without leaving their own state, for hogs purchased on this market. This money is absolutely new money in the state—it was brought in here from the North and paid for hogs, so that there is an increased circulation of nearly three-quarters of a million of dollars of money that has not had any opportunity as yet to return to the pockets of those who expended it, as it takes fully four months for a packing-house to be in shape to sell their meats to the consumers in the state. When the people of Texas will reflect that it is possible to sell this vast amount of hogs on a market in their own state and receive their money for it at prices that could not be obtained on any other market in the country, they must realize the eventual benefit to accrue to them from increased packing facilities at this point.

The people of Texas have responded to the call for hogs, which has generally been conceded as one of the best revenue producers on the farm, and have demonstrated that capital invested in the packing industry can now find investment in the state of Texas, and the establishment of industries of this description, commensurate with the requirements of the state and territory directly tributary, can safely be brought about, so that the vast volume of money identified with the industry can be retained within the state.

The company which I have the honor to represent is now laboring tirelessly in the North with this capital to bring it to Texas, and for the first time in the history of the state can we go before such capital with data of a convincing nature. We have no apologies to make for the performance of all we have promised to the people of the state, "if they would help themselves we would help them," but there has been some cheap chattering pertaining to over-production. To those who were inclined to be hasty with criticism, all I want to ask of them is to consider when it was ever possible in the history of the state before, to be able to dispose of 2000 hogs a day, as was done on this market last week at figures that, while the market was low, were still profitable to the producer, and then, if they can find it in their hearts to condemn an institution that even in its infancy has done such great good to the state, all I can say is, that they have not got the best interests of the general good in their hearts. Just as soon as it was demonstrated that we needed increased packing facilities, that very minute did we devote our entire energy to the procurement of increased capital and additional facilities to take care of increased conditions. There is as keen competition on this market at the present time as on any of the Northern markets, from the fact that we must have all of the hogs we can possibly get on the market, and in order to get them we must pay such competitive prices with the Northern markets as will absolutely prevent their shipment out of the state. But increased competition in the shape of additional buyers will naturally have a tendency to stimulate trade, and this we are after, and will have at as early a moment as possible, now we know we can secure business for such buyers. As we have demonstrated by our action, that all we have gone before the public with has been faithfully complied with, we urge a continuance of increased production of hogs, knowing we are now—and will be, as the needs require—in shape to take care of anything that comes.

W. E. SKINNER,
Gen'l Mgr. Ft. Worth Stock Yards.

HEALTHFULNESS OF OLEOMARGARINE.

A great deal of misapprehension prevails among the people as to the healthfulness and goodness of oleomargarine. I will make this statement that I know can be sustained: Oleomargarine is not a digestible product and not a wholesome product. The natural fat

in cow's milk melts in the human stomach at 92 degrees. Nature provided for this. For it was meant that butter fat should be a food for the tender young. Now oleomargarine melts at 105 to 108 degrees. Where is the stomach that can melt it? The result is that when taken into the stomach it is unmelted, and must be expelled from the stomach by mechanical force. The fat we use in cooking, lard and tallow, have already gone through a heating process before they are sold in the market, but the fats used in the manufacture of oleomargarine have to be extracted by some other process than that of heating. Again, if you will turn to Frank Leslie's Monthly Magazine for last June you will see an article on horses of the United States. Among other things, the article treats of the value of the dead horse in New York, and describes how bones and hair and flesh are used in the lines of commerce. It says the oil rendered from a dead horse is sold to the manufacturers of oleomargarine. That oleo oil is used in making oleomargarine, and yet there are persons so ignorant as to be willing to eat such a product. Some assert that oleomargarine is composed largely of butter. That is a mistake, for there is not a particle of butter in it. It is composed of fats from hogs and beeves, of cottonseed oil, of oleo oil, of which no one can tell for a certainty the composition. This compound is churned in milk to give it the flavor of butter. Phil Armour, under oath, testified to the composition of oleomargarine, and set the cost of a pound at 4.71 cents, exclusive of the government tax of 2 cents a pound. The manufacturers make from 200 to 300 per cent on their investment. Some of these men are posing before the country as benefactors of the people and as patriotic men. As soon as a man touches oleomargarine he is on a downward course. The effect upon a man is bad. Not a single hospital in Europe or the United States dares use this product in the food of their patients. They will tell you that it is a dangerous thing to feed it. Food adulteration is taking place in this country to an extent that is horrible, and this fraud is only one of them.

When the farmer sets out to have good roads throughout his locality and succeeds, which he will whenever he makes up his mind to, then will the young man stay on the farm and help to pay off the mortgage. He will find pleasures at home and in social life that are now denied him by reason of the fact that when he has time to enjoy the social events of the neighborhood, the roads are often in such condition that he would rather stay at home than undertake the trip. He soon regards the life of the farmer as one of drudgery, and the consequence is, he hies himself away to the city. He may profit by the change, but the chances are a hundred to one that he don't. He is generally at the age where he can't afford to begin at the bottom and work up. His farming knowledge is not in demand, and the various commercial enterprises want experienced help. Day labor, street car lines and such is his inevitable lot. The change has a fascination that holds him to it, and perhaps later in life he returns to the farm to learn that he has made a mistake. The girls, too, often are not willing to marry some sturdy young farmer, and if chance offers, will wed some happy-go-lucky fellow who has nothing to offer that is so great in her eyes as that "you live in town." Good roads will go far towards removing this state of affairs, for when good roads obtain the labor and vexations incident to rural life are, in a great measure, removed.—Farm Machinery.

FORT WORTH STOCK MARKET.

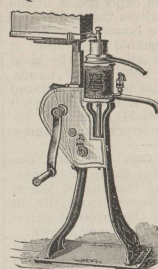
Fort Worth, April 4, 1896.

Beef steers.....	\$2.75@3.00
Feeders.....	2.35@2.55
Fat cows.....	2.20@2.45
Bulls.....	2.75@3.00
Stock hogs.....	2.75@3.00
Fat hogs.....	3.20@3.25

Flora—Collie told me last night that he believed I could break a man's heart with my smile. Laura—Collie was just talking. A man's heart is not like a mirror.—Cincinnati Tribune.

ECLIPSE HAY PRESSES.
GREATEST POWER. ECLIPSE. LIGHTEST DRAFT.
ECLIPSE HAY PRESS CO. KANSAS CITY MO.
600 WEST 7TH STREET.

ROUGH ON THE CAT



But the rest of the family greatly pleased.

The No. 5 United States Cream Separator gives the best of satisfaction. It makes the good wife laugh, the hired man smile, and the cat cry out, "no more skim milk, for it is too thin and poor for me." The Separator does its work perfectly, runs easily and steadily. We could not do without it.
R. L. FROST,
March 30, 1896. West Brattleboro, Vt.

SEND FOR A NEW CAT

catalogue giving full details, free to all.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

FARMERS! If you want satisfaction in ringing your Hogs, get the WOLVERINE Hog Ringer and Kings. Our ring will stop the worst roter. For sale by all hardware dealers. Insist on having the WOLVERINE. If you can not get it of them, send 75c, and we will send by mail our Double Ringer and 100 Assorted Rings. Address: HEBSON BROS. CO., Patentees and Manufacturers, Tecumseh, Mich.

Fort Worth Stock Yards Co.

COMPETITION IS THE LIFE OF TRADE.

Competitive hog buyers located on this market, who will buy Light, Heavy and Stock Hogs constantly. Prices paid that will not admit of shipping elsewhere. Competitive cattle buyers on this market, who will buy all the Fat Cows, Feeders, Light Steers and Canner Cattle offered at satisfactory prices.

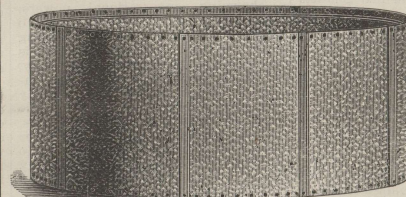
Ship Your Hogs and Cattle to Your Home Market.

WRITE FOR MARKET INFORMATION.

G. W. SIMPSON, President.

W. E. SKINNER, General Manager.

The New Process Steel Stock Tank.



(The only successful ALL STEEL stock tank on the market. Our patent seam gives six thicknesses of metal at each upright seam. Heavy angle steel at top and bottom, giving it Great Strength and Durability. We manufacture Cisterns, Tanks, Roofing, Fire Extinguishers, Etc. Circulars free.

Address THE NEW PROCESS MANUFACTURING CO., Dallas, Texas.

THE NEW "BONNIE" RIGHT-HAND BINDER

For Capacity, Strength, and good work under any and all circumstances, the New "Bonnie" stands unrivalled. It is the lowest elevator Binder on the market, which is a great saving of power. The high, wide drive wheel has great traction power, which, coupled with low elevator, makes it the lightest draft Binder on the market. The seat is low, enabling the operator to step easily into it from the ground. The Reel is the acme of perfection. No other has the same scope of adjustment, all accomplished with a single lever. The Decks have a steep slant, which is appreciated by all users of Binders. Our whipping device is a novel feature and leaves the driver free to drive and use the levers. He simply pulls a rod, the whip does the rest. This novel device pleases every one. It has the simplest knottor, most reliable trip, and is guaranteed as represented or money refunded. The "Continental" Giant Combined Header and Binder cuts 12 feet and binds a bundle each second, and can be used as a Header when desired. Write us for Catalogue, prices and terms. We are headquarters for Binder Twine.

PARLIN & ORENDORFF CO., Sole Agents DALLAS, TEX.

LIGHTNING HAY PRESS
IT IS THE BEST. Our Catalog tells why. Kansas City Hay Press Co., 108 Mill St. Kansas City Mo.

Star Hay Press
Is Light, Strong and Durable. Made Entirely of Iron and Steel. Write for circulars. MANUFACTURED BY The Devo-Livengood Mfg. Co. 8th & Mulberry, Kansas City, Mo.

WHITMAN'S BALING PRESSES.

Telescope Connection. All Styles. The most perfect line of Warranted Superior to any in Use. If you want the best, send for circulars and prices. Manufactured by WHITMAN AGR'L CO., St. Louis, Mo.

Texas Farm and Ranch

is a journal for the Southern farmer. It gives the very best matter in all departments of agriculture. Fifty-two issues for one dollar.

Household

Edited by Mrs. S. E. Buchanan, Dallas, Texas, to whom all communications for this department should be addressed.

A PARTING.

FRANK H. MORGAN.

You say that all is ended; you return my letters and ring
And all the sweet love tokens that I have loved to bring
You have broken the ties that bound us, yet I must bear the blame.
Ah well, since Eve beguiled us that story has been the same.

Of course you were not flirting—you are so pure and true
And innocent, the world would never think that of you.
Your tender, witching glances, they were not meant to lure
Like a practiced coquette's wiles, winning and tried and sure.

Those vows your lips have uttered, of course they were in jest.
The world might call them falsehoods; call them what you will.
The letters you now return: How have you answered them?
Have you spoken one word of truth with either tongue or pen?

My rival is rich, they say, in houses and gold and land.
I could only offer a true heart and strong right hand.
I was a fool, I suppose, to think that these could vie
With the glittering prize he unfolded before your wistful eye.

Oh, no, I do not blame you; I have loved you too well, I know;
I ought to rejoice, perhaps, that my dream has ended so.
But will you ever regret that you to-day have said
Your beauty and your talents, your soul itself, for gold?

When you stand at the altar and pledge the solemn vow,
To love, honor and obey, will not shame flush your brow?
For in that marriage mockery true love will have no part;
Though gold has bought your hand, it has not bought your heart.

Farewell! Nay, excuse me, I had rather not take your hand;
On it I see the buyer's mark in that gem-set golden band.
Some day it will burn you, and in your heart you'll feel
That the silken bands of Hymen are fetters of cruel steel.

CALHOUN, TEXAS.

CHAT.

Once again has the Household to mourn for one of its members. Mrs. E. O. Dannelly, after long time suffering from bronchial trouble has found succor from suffering in the joys of immortality. We were children together at our first school, and warm friends in later life, and the news of her death makes us very sad, and is a sad reminder that we, too, are journeying rapidly down the western slope, to the border land of sunset.

Sharlott Hall, yours is a splendid letter this week, covering every phase of the subject. We have had it for some time, but such sentiments age cannot wither, and we are glad to have our contributors speak in such plain and truthful words, upon a subject so vital.

Success to you, Mrs. Waterman, in your new home by the sea. How we wish we might join you in your stroll along the beach. Ourselves, we love the ocean. We feel sure the Household will enjoy your greeting to Texas Farm and Ranch, showing your genuine affection for us, who make up that department. Indeed, we will all enjoy an account of that long journey, and hope you will give it to us.

Dan Fox records a new martyr; this modern martyr is of the Staked Plains, rather than the burning stake. He excites our risibles by his drollery and our sympathy in his patient submission to the powers that be, in turning night into day, for meal times, and day into night for labor. Are the birds that hit and sing as they stream, silent or jubilant when Sunday comes; does your hysterical merriment affect their gaiety? We will enjoy a continuation of your letter; modern chivalry seen through your glasses must present a somewhat comical appearance.

Uncle Lee, the announcement of your "Piece of Good Luck" has been delayed longer than we intended it should. In the name of the Household we most sincerely congratulate yourself and Aunt Lee, on the advent of the little girl, and wish for her all the good gifts to mortals given, and we will enroll her name upon the kindergarten list and claim her as ours as well as yours. May the little one grow to honor and comfort you to the end of life.

Reuben, 'tis a pity you have allowed your similitude to keep you so long away from congenial society, to which you

would have been welcomed. The editor must thank you for your complimentary words and kind expressions, at the same time she realizes that not alone to her belongs the honor or credit of making the Household enjoyable, it must be shared equally with the good friends who have held up our hands. It is to be hoped that both yourself and Bartemus may find a congenial spirit among the Household girls, and together, continue to grace our columns.

Mrs. Elizabeth Otis Dannelly, nee Marshall, died at her home in Gainesville, Texas, on the evening of March 21st. Thus has passed from life to immortality one of the loveliest Christian characters we have ever known.

Mrs. Dannelly is widely known in Georgia, the state of her nativity, in Baltimore, where she long resided, and in Texas, her adopted state. She was born in Monticello, Ga., June 13th, 1838, and graduated from the Madison Female College, Madison, Ga., in 1862, with distinguished honor under the presidency of Rev. Thos. Pierce.

Mrs. Dannelly was a type of the finest antebellum Southern womanhood. Reared in an atmosphere of culture and piety, she combined in an eminent degree those characteristics which make a perfect woman. Gifted with a high order of intellectuality and a deep unwavering faith in Christ, hers was a life singularly free from anxiety or care trusting ever in the divine assurance "He doeth all things well," her sorrows and disappointments were confided to the Savior's gracious care, and the current of her life flowed evenly along under the most trying circumstances.

She was well known in the literary world, having published two volumes of poems, having contributed at various times to the Baltimorean, the Magazine of Poetry, The Wesleyan Christian Advocate, The Nashville Advocate and the Texas Advocate. Few are so rarely endowed by nature as was she—poet and artist, an engaging personality, charming conversational powers, and withal practical, "looking well to the ways of her household." Having known her from earliest childhood this tribute to her purity, piety and lovely, cultured womanhood is given in memory of an unbroken friendship of many years, the recollections of which are like the odors of sweetest flowers. Mrs. Dannelly leaves five sons to bless her memory and mourn her loss. She passed away quietly as she sinks the day to rest at twilight hour, after a day of acute suffering.

MRS. S. E. BUCHANAN.

FROM THE GOLDEN STATE.

PHALLA M. WATERMAN.

Dear Household Sisters: Here I am just to tell you how delighted I have been, as I bask in the sun in Southern California instead of shivering around in Wisconsin. I thought of moving to Texas at first, but a relative wished me to be a neighbor, so I gave up the Texas fever (and I had it quite bad) and took California fever.

Of course 'tis beautiful weather here, blooming flowers, singing birds and ripe fruit of various sorts—so nice it all seems to me, who has been used to ice and snow in winter months, instead of lemonade and fresh strawberries in open air.

As we sit here to-night we can hear the ocean roar as its foaming waves lash the shore. We, like many others, have learned to love the grand old ocean and long to be lulled to rest by its singing when nearer. I have made a visit to the little summer resort at its banks; 'tis only seven miles farther west, and I will always remember the first visit there. The great sea gulls cooed softly as they walked up and down the beach, the steamers and boats rocked gently on the waves and the great sea lions could be plainly seen as they played in the waves—all so new and charming to us, for we had journeyed more than three thousand miles to seek health and home by the ocean.

We gathered such a lot of pebbles and shells, but by having too(?) much sympathy for the horse we left part of them for some one else. But we found we had a nice assortment when we looked them over at home. Some time in the near future, if our kind editress will give space, I will give you a brief sketch of my journey across the continent, should you like to hear it. I cannot but feel that it would be an impossibility to keep house without Texas Farm and Ranch. You can scarcely realize how delighted was to tear the wrapper as it reached me in this new Western home among

strangers; why, do you know, tears of joy stole shyly down my cheek as I turned to the Household, but don't you tell.

Will Mrs. Shields kindly send her address? I will be glad to know. I must now bid you adieu.
Gardena, California.

A PIECE OF GOOD NEWS.

UNCLE LEE.

Dear Mrs. Buchanan and Household friends: I trust I am not intruding by my frequent visits, but as I have good news for you all, I will come in for a short stay. First, let me thank you, Mrs. B., for your kind words with reference to my last letter. It does wife and I a great deal of good to have one speak as did you; besides, it helps to brighten our already happy home. Since the 22nd of January our home has been made doubly happy by the arrival of a most beautiful golden-haired, blue-eyed baby girl. Those who have the experience of such gifts can imagine our happiness. I think of all the pleasures she may bring us, and at the same time feel very sensibly the great responsibility that now rests upon us as parents. God willing, I'll do my part by her in raising her up to do honor to her parents, and above all, to her God.

I would like every Christian parent who may read this to ask God in a word of prayer to help Uncle and Aunt Lee bring up their little girl as she should be brought up—not only loved by her family, but by all with whom she may be thrown. Now, Mrs. Buchanan, will you welcome little Lillie Florence into the Household, as one of the Household babies? If you will, and wish at any time to have her photo so as the Household may see it, I will try and get it for you.

I want to thank Billy Biggs for kindly mention in issue of February 15. I must say come again, Billy, you are one of my favorites.

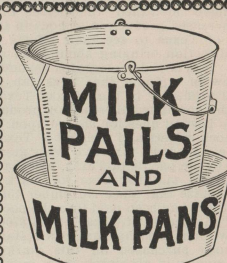
I would be glad to hear from Francis, and will say, if she sees the young lady that said, "He's after a girl to make fires and chop wood for him," tell her I have got her, but that I do all that kind of work.

Mrs. Buchanan, I would like to call the attention of the Household to the fact that there is a motion and second before the house to have some of the Householders represented each week. So this being the case, I move that our dear editress present herself first and call for next. I hope this will meet with a second, for I think it a good idea.

Well, excuse me. I forget sometimes and go on gabbling. With best wishes, I'll say good evening.
Morgan, Texas.

Dear Mrs. Buchanan: I am very anxious to find my father, J. C. Jamison, and also two brothers and two

GOLD DUST.



can be kept clean and sweet with Gold Dust Washing Powder. There is no soap, washing compound or cleanser that so thoroughly cleans milk pails, cans and other dairy accessories. It cuts the obstinate grease that will accumulate and lightens very much the work of keeping the dairy clean and sweet.

GOLD DUST WASHING POWDER

is the greatest aid to hard-worked women. Invaluable for every kind of cleaning. Cheaper and better than any soap. Large package costs but 25c. at all grocery and general stores.

GOLD DUST WASHING POWDER has an additional value to the farmer for destroying insects. Send us your name and address and we will mail you an important booklet containing recipes for making kerosene emulsions, for spraying crops and trees and live stock.

THE N. K. FAIRBANK COMPANY,
CHICAGO, ST. LOUIS, NEW YORK,
BOSTON, PHILADELPHIA.

DEAFNESS
and Head Noises relieved by using Wilson's Common Sense Ear Drums. New scientific invention; different from all other devices. The only safe, simple, comfortable and invisible Ear Drum in the world. Help where medical skill fails. No wire or string attachment. Write for pamphlet.
WILSON EAR DRUM CO.,
Office: 258 Trust Bldg., Louisville, Ky.
112 Broadway, New York.

All About Hunting and Fishing in Texas and the wilds of the Indian Territory, described and illustrated.

Cyclist and Sportsman,

PUBLISHED BY
W. B. & C. F. Wiltmans, Dallas, Tex.
Price: \$1 per year. 179 ELM ST.

EVERY CAUSE BUT THE RIGHT ONE.

Your headache: You lay it to every cause but the true one—indigestion. So few people know what indigestion really is. Hardly know they have it. The cure is Ripans Tablets. A single one gives relief. Ask your druggist.

Ripans Tablets: Sold by druggists, or by mail if the price (50 cents a box) is sent to the Ripans Chemical Company, No. 48 Spruce St., New York. Sample vial 10 cents.

wasting

Children should be happy and plump. A child of seven should not be thin and pale, with the aged look of twenty. No aches; no whines; no house-plant. Running, jumping, laughing. Children should grow in weight and strength; eat heartily and show plump cheeks.

Scott's Emulsion of Cod-liver Oil with Hypophosphites fills out the sunken cheeks and gives color to the lips. It furnishes material for the growth of bone, and food for the brain and nerves. It lays a strong foundation for future growth and development.

SCOTT'S EMULSION has been endorsed by the medical profession for twenty years. (Ask your Doctor.) This is because it is always palatable—always uniform—always contains the purest of Norwegian Cod-liver Oil and Hypophosphites.
Put up in 50 cent and \$1.00 sizes. The small size may be enough to cure your cough or help your baby.

About Bees

LONGEVITY OF BEES.

C. Davenport says in Gleanings: "One summer I had a strong second swarm issue from a large box hive. I do not remember the date, but it was just before basswood blossomed. The queen of this swarm was lost, on her mating trip, or in some other way, for I am certain that they did not have a laying queen at any time during the summer. I thought I would let them do without one, to see what they would do. They were hived on combs that contained considerable honey, so they did not have much room to store below; but they filled up what room there was, and then, instead of working much in the sections, they took the world easy. In the fall I thought I would unite what few of them were left with some other colony; but on coming to examine them I was surprised at the amount of bees there was left. There seemed to be nearly as many as when I hived them; so in order to experiment further they were put in the cellar where the rest were. They came out in good shape in the spring. A queen was given them; and although they dwindled away very fast, they pulled through all right. Now, in this case the workers lived at least ten or eleven months, not only a few, but thousands of them. If the same thing had been tried the past summer I do not think there would have been a live bee left after they had been in the cellar a month."

WHY BEES WORK IN THE DARK.

Yankee Blade.

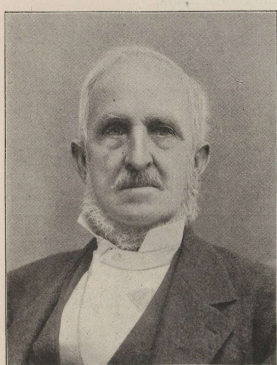
Bees go out all day gathering honey and work at night in the hive, building their combs as perfectly as if an electric light was there all the time. Why do they prefer to work in the dark? is often asked. Every one knows that honey is a liquid with no solid sugar in it. After stinging, it gradually assumes a crystalline appearance, or granulates, and ultimately becomes a solid mass.

Honey has been experimentally inclosed in well-corked flasks, some of which were kept in perfect darkness, while the others were exposed to the light. The result was that the portion exposed to the light soon crystallized, while that kept in the dark remained unchanged.

Hence we see why the bees are so careful to obscure the glass windows which are placed in hives. The existence of the young depends on the liquidity of the saccharine food presented to them, and if light were allowed access to this, it would, in all probability, prove fatal to the inmates of the hive.

A TEXAS PIONEER.

M. S. Munson is one of the pioneers of Texas. He was born in Liberty county April 24th, 1825, when Tex-



as was a part of the Mexican republic, and but a few of the white race had ventured west of the Sabine. Three or four years later the family removed to Brazoria county, and there the subject of this sketch has resided ever since. He attended an old field school in Brazoria county, and a more advanced one at Ruttersville, now Fayette county, and entered college at La Grange, Ala., and completed his course at the University of Lexington, Ky., of which Dr. Henry B. Bascom was president; graduating from this university, delivering the valedictory address, in 1847; attended law school at New Orleans, La., but the

cholera epidemic prevented the completion of his studies there.

He returned to Brazoria county and entered upon the practice of law, having an office in Brazoria and one in Houston, and was actively engaged in the practice for about 35 years.

From the age of 14 until the close of the civil war his life was checkered by experiences, which, if noted in detail, would fill more space than we have at command. During that time, with the exception of the time while at college, he was occupied partly in fighting Indians. He was in the Summerville expedition into Mexico, in which the Texans, for the first time, whipped the Mexicans on their own soil, and proved to the world that they were entitled to recognition as an independent government. He served for several sessions in the legislature as a democratic member, and when the circumstances arose that made necessary the war between the North and South, he was a member from Brazoria and Galveston counties, and voted for secession. He entered the Confederate service in Gen. Waul's legion when the war commenced; was actively engaged in the service until the siege of Vicksburg; was captured, paroled, and when exchanged, returned to his command; was in the battles of Mansfield, Pleasant Hill, Jenkins, Ferry and others, until at the close of the war he was finally discharged at Homestead. He was married in 1850 to Miss Sarah K. Armour; resided in Brazoria county and raised a family of eight children, six sons and two daughters, all of whom are now living. Mr. Munson has been a subscriber to Texas Farm and Ranch for many years, and paid at one time ten years subscription in advance.

MAKING GRAVEL WALKS.

American Gardening.

To make a really good walk it is necessary to go to rather more trouble than is ordinarily done. The first thing to consider is the nature of the land—is it wet or dry? If in any way wet, then drainage becomes a leading feature, for a garden path should always be dry spot. To secure good drainage and a good foundation, the space set apart for the path (the width depending much on local surroundings and requirements) should be dug out and the soil removed for a good depth, say at least 18 inches, but more will be better; then place a layer of rough stone, then a sprinkling of smaller stone to fill in, then a layer of brush wood—cord wood or boughs will do. Next, any kind of hard stone or flints; then follow with a layer of lime rubble, and after that fill up with good stone; some dirt may now be used to fill up and to make a surface. After this leave the path for some time to settle, and use the roller often to facilitate matters in that respect; don't be in a hurry to get your gravel on—wait until your bed is firm before doing so.

Care should be taken in putting in the different layers to keep the center well up so that the path will finish with the center raised at least three inches when solid; therefore in pegging out it is well to have your center stick at least five inches longer than the two side ones, so that after rolling and making solid you will have still a good round walk. If the ground to be broken consists of gravel or sand, the above preparations may be considerably modified; still, under any conditions, to make a really good path, a good foundation is essential.

He—My dear, I am very hard up. You will simply have to lower your dressmaker's bills. She—My love, you must speak to her. I don't make out the bills—New York World.

Scrofula and Scrofulous eruptions, whether hereditary or contracted can be cured by the use of Dr. Simmons' Sarsaparilla. What it is composed of is printed on the label. Only 50 cents.

EXCURSION TO MONTEREY AND CITY OF MEXICO.

On April 17th, VERY LOW EXCURSION RATES will be made to Monterey and City of Mexico for the Epworth League Excursion. Call on nearest Agent for full particulars.

D. J. PRICE,
A. G. P. A., I. & G. N. R. R. Palestine, Texas.

ITALIAN BEES

You're the loser unless you keep bees to gather the sweets of nature about you. Bee Keeping is Pleasant and Profitable to either sex, in town or country. Sixty Page Bee Book Free at
J. M. JENKINS,
Wetumpka, Ala.



"No wonder poor Dinnie's so tired, carrying all day that great big piece of

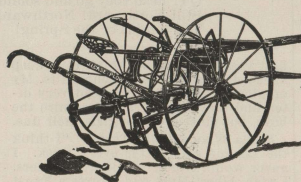
BattleAx PLUG

No matter how much you are charged for a small piece of other brands, the chew is no better than "Battle Ax." For 10 cents you get almost twice as much as of other high grade goods. The 5 cent piece is nearly as large as other 10 cent pieces of equal quality.

Every Bee-Keeper needs BEE HIVES

Shipping Cases, Frames, Etc. Strong serviceable and convenient. Write for our price list. G. B. LEWIS CO., Box 25, Watertown, Wis.

SILVER KING Combined Cultivator.



THE BEST UP-TO-DATE. All Iron and Steel except Pole, Doubletrees and Handles.

Made Specially for the TEXAS Trade.

We furnish any of the following styles of Gangs:

No. 100—Four Shovel Parallel Automatic Spring Trip.

No. 20—Four Shovel Rigid Automatic Spring Trip.

No. 201—Four Shovel Parallel Safety Slip.

No. 202—Four Shovel Rigid Safety Slip.

No. 206—Eight Shovel Spring Teeth.

We also make the celebrated WIZARD WALKING and ECLIPSE RIDING CULTIVATORS. Ask for J. I. CASE SILVER KING, ECLIPSE or WIZARD. Take no other.

Address J. I. CASE PLOW WORKS, Racine, Wis.

S. H. SHANNON, Gen'l Agent, DALLAS, TEXAS.

THE "CONTINENTAL" CHANGEABLE SPEED MOWER

Cut this "ad." out and tell your dealer to order for you, or write us direct for Special Prices.



This Mower has made a record in Texas that is without a parallel in the history of Mowing Machines. Its Changeable Speed gives it a prestige over all Mowers because the people who use it say it's practical and useful. It enables them to use a fast speed in Bermuda patches, or when the team walks slow, and to use oxen, if desired. This change of speed is accomplished by the mere touch of a lever without even stopping the team. The slow speed is the same as all other mowers. The fast speed is half as fast again.

We use serrated ledger plates, which insure the greatest cutting capacity without loss of power, and prevents grinding knives so often. Each machine furnished with a splendid weed attachment. There are many other points of merit that we can't name here, but the Continental has come to stay. It is the tightest draft, best finished, and will cut any mower on earth. Catalogue mailed free.

carry a full line of Haying Machinery. Hay Presses, Drag Rakes, Coil Tooth Rakes, Mower Knife Grinders, Bale Ties, in fact, every thing in the Farm Implement and Vehicle Line. Write us for your wants.

PARLIN & ORENDORFF CO., DALLAS, TEX.

Cousins' League

Edited by Mrs. S. E. Buchanan, Dallas, Texas, to whom all communications for this department should be addressed.

TWO VOTES.

Along in November, when chill was the weather,
Two ballots were cast in a box together,
Two ballots were cast in together;
They nestled up close like brother to brother,
You couldn't tell one from the other.

Chorus—They were both rum votes
And sanctioned the license plan;
But one was cast by a jolly old brewer
And one by a Sunday-school man.

The Sunday-school man—no man could be truer—
Kept busy all summer denouncing the brewer,
All summer denouncing the brewer;
But his fervor cooled off with the change in the weather,
And late in the autumn they voted together,
In autumn they voted together.

The Sunday-school man had always been noted
For fighting saloons—except when he voted,
Fighting except when he voted.
He pled up his prayers with a holy perfection,
But knocked them all down on the day of election,
All down on the day of election.

The foxy old brewer was cheerful and mellow,
Said he: "I admire that Sunday-school fellow,
I admire that Sunday-school fellow,
He's true to his church—to his party he's truer;
He talks for the Lord, but he votes for the brewer,
He votes ev'ry time for the brewer."

Chorus—They were both rum votes
And sanctioned the license plan.
If the devil gets the jolly old brewer,
Then who gets the Sunday-school man?

CONDENSED LETTERS.

Ed Traley, Marshall, Texas, thinks Willa Griffin may be right about boys, but she is mistaken about girls. He would like to correspond with Clyde Lancaster, as he is learning the printers' trade.

Agnes Higginbotham, Bryan, Texas, loves the Cousins' League and longs to go to school, and would like to correspond with Albert Hurt.

Daisy Miller, Windsor, Mo., has three pets, a calf, a cat and a rooster; their names are Daisy, Blue Bell and Harry. Harry gets into the house as often as he can for food. Daisy is ten years old.

Lucile Gaston, Granbury, Texas, reads the Cousins' League and the Youths' Companion. She plays the organ and loves music.

May Wood, Monahan, Texas, lives on a ranch and there is no school near enough to attend; is eleven years old, is an only child, but she studies at home.

Lizzie Baurman, Newton Hall, Texas, is a little Panhandle girl eleven years old, who enjoys living in the country. Wishes great success to Texas Farm and Ranch and the Cousins' League.

Deborah Smith, Post Oak, Texas, is ten years old and has been reading Texas Farm and Ranch a long time; lives on the farm and likes it; her only pet is a little kitten named Bell.

Josie Lee, Stampede, Texas, wishes to join the League; is eleven years old and goes to school.

Lizzie Gerrish, McKinney, Texas: Papa has been taking Texas Farm and Ranch for about three years and I love to read it. I like to go to school. I would like to exchange the song, "The Little Girl in Blue," for "The Ship that Never Returned."

Mary L. Trippis, Rockport, Texas: Papa's garden and cabbage are looking very nice. We have had some right cold weather, but no ice. I wish Sallie Mitchell would write again.

Adah Wilson, Florence, Texas: "I am only eleven years old, but I can do almost any household work, and I help mamma nights and mornings and Saturdays. I would like to correspond with some of the Cousins."

Hattie McBryde, Pinta, Texas: "I am going to school and love it very much. I have two dolls—a big one and a smaller one. I love to play with them. I am eleven years old. With best wishes to Aunt Sallie and the Cousins."

Cora Nelson, Rising Star, Texas: "Aunt Sallie, I wish you were here to spend Christmas with us. I have no mother; I have one brother seven years old. I am only nine."

Sallie Battaille, Hillsboro, Texas: "I think it would be nice to have a new subject to write about. I have one pet, a pony, named Flora. I would like to exchange songs with some one. I will send Daisy Bell, The Fatal Wedding,

or anything I have, for Won't You Be My Sweetheart, and The Two Little Girls in Blue."

Grace Montgomery, Rising Star, Texas: "It is raining to-day. Cora and I are playing together. We have each a doll, a baby buggy and a hand wagon. We go to school. I love to read Texas Farm and Ranch."

Black-eyed Susan, Bosqueville, Tex.: Is very much concerned about the orphan children in Buckner Orphans' Home, and wishes the Cousins to remember these dear little orphans.

Millie Goss, Farmersville, Texas: Wishes to know if any of the Cousins can tell where the Indians came from. Sends good wishes to the Cousins and Aunt Sallie.

Benj. F. Irwin, Granger, writes: "My papa takes Texas Farm and Ranch and I enjoy reading it so much; I always get it first, and generally read it through before I put it down. I live on a farm and like it. Near us are good churches and a school house, where I attend Sunday and day school. Best love to the League and Texas Farm and Ranch."

Fred Murphy, Wolfe City, writes: "Will you let me in? I love to read the Cousins' letters. I have no pets, but I go to school and love my books."

Kate H. Stone, Iowa Park: "I think the boys make greater progress the

position. Or, in other words, I think, perhaps, she made a mistake in writing—got everything backwards. So, cousins, if you will only revise that composition it will be all O. K. Cousins, how many of you read Herbert Taylor's buzzard ride? (In the News). Perhaps some of the Cousins would like to know my age. I am 5970 days old. I will close, for I think the waste basket will get this, and I don't want it to get too much at one time.—Jeff. C. Miller, Hamilton, Texas.

(Willa had my congratulations, Jeff, for the very amusing way she handled her subjects. I believe the boys enjoyed them, too, don't you?—Aunt Sallie.)

Dear Cousins: I will come again and try and help out the boys. I think that Albert Hurt writes a nice letter. I like to read his letters. Come again. Well, I want to exchange two songs for one; the names of them are the Old Songs and Annie Laurie, for Two Little Girls in Blue, and Willie Tyler has the Two Girls in Blue. I wish some of the Cousins would send me the Ship that Never Returned and I will send them the Spanish Cavalier. Now, Aunt Sallie, as this is my second time, please don't send me to the waste basket. I will not stay long, as it is my second time. Bloomers are in style now, and they are daisies. I think when I see

wishes to Aunt Sallie and the Cousins. —Don Juan Holt, Conroe, Texas.

(Thank you for your invitation. I should like to accept it. I love both the pine woods and fish and would very much enjoy a day in the woods or on the lake with you.—Aunt Sallie.)

Dear Aunt Sallie and Cousins: As I have not seen any letters from this part of Texas, I thought that I would write a few lines and ask the Cousins if they would chat a while. You have got quite a large crowd in your parlor, Aunt Sallie. First, I will tell you, Willa Griffin, that your position about boys is all right in one way, but in another it isn't. Boys wear out everything they can get hold of, both soap, brush and comb—at least I would like to do it if I could have the same things right along. Your composition about girls is a little extreme. You say that they have long hair; the most of them have, but I have seen girls that had their hair cut as short as a mule's mane. Girls, as you say, never wear out smartness, as they think themselves awful smart all the time. The girls have always a lot to say, but it don't amount to much; but still I will take the girls' part. A "hill of beans in Georgia" is an old saying. I don't think that Albert meant to tramp on your toes, auntie, when he said that. Stanzie Triplett says: If the boys learn faster, why

HARBINGERS.



"Hark!" "Hark!" Across the fleecy sky
The wild geese from the Southland fly,
O'er head they go and sound their cry,
Still Northward! Northward! Driven by
The Genius of the Spring!

They herald in the golden hours,
The April buds, the Easter flowers,
The sunshine and the soft, warm showers,
While all the blue birds sing!

—ROY L. MCCARDELL.

first year, but I do not think they keep ahead during the whole school life. My opinion is, the girls get ahead very often and they stay ahead. I admire the boys, but must give the girls their due.

Stella Woods, Bells, Texas: "I think the League gets better every week. I never would tire of reading the letters. I wish Albert Hurt and Lauretta Faust would write often; they write such good letters."

Very short letters have been received from the following Cousins, in January:

Bert and Lacy Spearman, Valley View, Texas; Sadie Gray, Hopson, Ky.; Hattie McMahon, McKinney, Texas; M. E. R., Grand Prairie, wrote with red ink, which I could not read; May Blackwell, with Millie and Minnie Meyers, of Brady, Texas; Docia Beard, of Arizona, La.

Dear Auntie: As the pleasant opportunity greets me, I will endeavor to pen you and the dear Cousins a few lines. Auntie, how did you like Miss Lauretta Faust's proposition? I think it would be simply grand. Hattie Green, your letter was very nice—just as nice as could be. I would be pleased to correspond with you, if agreeable. Now, about Willa Griffin. Sakes alive! Sakes alive! I will not attempt to correct it, for I would have to revise and rewrite the whole com-

a woman dressed in bloomers they are an awful sight. I enjoy dancing very much, but I don't like to see a girl walking with a boy. I have been to seven dances this winter and four plays. I won't tell my age, for I am afraid I am not of age yet. Down here where I live the dirt is as black as it can be, and it sticks tight when it gets wet. We can't raise any gardens nor fruits, except peaches and plums; they don't do so very well. I would like to correspond with any of the Cousins.—Wilber Massey, Heidenheimer, Texas.

(And you don't like bloomers, Wilbur? They are getting to be quite common in Dallas, but I do not like them either. I do not think that boys and girls should give too much of their time to plays and dances.—Aunt Sallie.)

Dear Aunt Sallie and Cousins: I want to join the Cousins' League. I am a little boy ten years old. I am going to school and like my teacher very well. I have four little brothers younger than myself; we help mamma do her work. Papa is gone the most of the time; he is a carpenter. He is building a saw mill now. We live in Montgomery county, in the piney woods, two miles and a half from Grand Lake—a fine place for fishing. Come down, Aunt Sallie, and we will have a fine time fishing. Now, don't you promise any of the rest of the Cousins, for I gave you the first invitation. I will close. Best

don't they write oftener and display their learning? It is because they are not so anxious to have something to ters. You asked, what great thing has women ever done? Woman has done some wonderful things. The first thing woman did caused the whole world to sin. Is not that great? I agree with Auntie; where is the boy who would have a sweetheart who could not do these things and more? I wouldn't, I am sure. And so I must close for the first time, hoping that I have not trampled on any one's toes. Dennis you may put my name down with your "Heart and Hand" band, but I am sorry to say that I have been in the saloon more than once. How many names have you?—Arthur Sandberg, Louise, Tex.

(Arthur evidently has a soft spot in his heart for the girls, but like all men from Adam down he is disposed to say "the woman did it." He says the girls are to blame for the "quarrelling" in the League. 'Tisn't quarrelling; it is only a little peasantry, sometimes a little too tart.—Aunt Sallie.)

Dear Aunt Sallie and Cousins: I have read so many nice letters in Texas Farm and Ranch to-day I thought I would write, too, as I have not written since Aunt Emma had charge of the League. I expect the Cousins have forgotten me. I am very lonely now, as my sister Emma was married on the 15th day of January. I miss her very

sisters, Josephine Jamison, John H. Jamison, Thomas F. Jamison and Ida L. Jamison. They left Bell county some eleven years since. Any information will be thankfully received from any of your many readers. I read Texas Farm and Ranch and enjoy it very much.—Mrs. Eliza J. West, Red Oak, Texas.

THE CAUSE OF THE INCREASE OF GIRL BACHELORS.

SHARLOT M. HALL.

In her letter of September 7th, Matron has touched one of the deepest wrongs in our social system—one so all-pervading that the remedy seems far to seek. Perhaps it can only be found in a slow social evolution; but if so, it is worth every woman's while to do all in her power to help on that movement.

As yet the world is governed by an unwritten law of public opinion, made and directed by men, as truly as our written laws are. And like them, it is sadly one-sided in its operations.

Men often say that women are far less ready to help a fallen woman than men are; but they fail to add the fact, that the woman who dares to give such help must have an unimpeachable social position or she is at once branded as "no better than she should be," and subjected to many a covert sneer. What father is willing that his daughter shall continue to associate with one of her girl acquaintances who has veered one step from the path of virtue? Yet she will meet that poor girl's betrayer in the best society and no one dare whisper that he is not a fit associate for the purest woman in the land.

That is the outcome of the old way, when men found it very pleasant and convenient to be moral by proxy, and demanded from the women of their family a purity of life, which was considered rather detrimental in man. A man was supposed to make all the better husband and father from having "seen the world," and "had his fling." Having sown an extensive crop of wild oats he garnered it at leisure in his own home; but he bawled the fruit as "mysterious afflictions of Providence," and rigidly ignored the old law of cause and effect.

To-day we are in the throes of a social earthquake slow, perhaps, but clearly perceptible; and out of it the more hopeful of us look for the coming of the new way, when men and women shall stand as equals—equally free and therefore equally responsible, in every aspect of life.

The power of education is slowly, but surely pushing aside the narrow standards of the past. The struggle has been desperate, but there is only one possible result. The very efforts to suppress scientific knowledge on sociological subjects, has but fostered what it meant to destroy.

Our literature, and even our newspapers, give evidence of this.

Men, as well as women, are protesting against the false standard of morality which reacts so fatally on all the human race. They realize that the old idol of innocence which rested on a basis of profound ignorance, is shattered, and must be replaced by that pure-minded, intelligent knowledge of all the functions of life, which is above evil aims or thoughts.

Such books as Heavenly Twins and Trilby, are a link in the chain of education. They reach people who would not give attention to the same thoughts if they were presented without the veil of romance. Even the much-condemned works of Zola and his imitators, have done good, for they have compelled people to realize that there is an evil side to the world, and that virtue must be armed with knowledge to successfully cope with it. Just in proportion as women come to know and understand what the sowing of "wild oats," with all its far-reaching evils, really means, will men be compelled to live purer lives.

It is said that the advent of women into the world of business has caused a startling decrease in marriages, and the cause has been variously stated as selfishness, love of ease, and desire to escape the cares of home and family on the part of women.

The deeper reason is this, that no intelligent woman can long meet the world, face to face as a bread winner, without becoming aware of the double lives which a vast army of men lead. Her eyes are opened to the meaning of little "jinks," and "times with the boys." She catches glimpses, faint, perhaps, but significant, of soiled and blackened chapters in their lives, which would make sorry reading for wives

and daughters. Our newspapers chronicle such things every year, and that in highest social circles.

Is it to be wondered that the "girl bachelor" grows afraid? That she is too cautious to trust her future to the keeping of a man of whose life she can know but little? That she chooses to renounce the crown of motherhood, rather than risk entailing upon her children the moral and physical taint of a father's dissipation?

With the possibility of earning her own living independently, woman is coming more and more to realize her personal responsibility as a human being. In the physical, mental, moral defects of her children she sees not so much a dispensation of Providence as a result of heredity. It is useless to expect figs from thistles, and if she fails to learn this in time herself, she takes all the more care to instill it into the minds of her children, so, that we have a growing tendency on the part of young women to demand from their would-be husbands such a character as they would not be sorry to see passed to their children.

A man, a physician of long experience, once said to me rather bitterly, in bewailing the shortcomings of woman-kind, that "a man ought never marry a woman whom he would be ashamed for his children to call mother." I replied that a woman ought to exercise even greater caution, and the look of astonished disapproval on his face, showed that it had never dawned upon his mind that it was necessary for the woman to have any opinion at all, so long as the man was satisfied.

We plead to-day for a better union than this, a union to which both parties bring pure lives and noble aims; in which both are expected to have high ideas of truth and duty and a realization of the necessity of exercising caution and common sense in marriage, as well as in other relations of life. On such a union must be built the ideal home, and there is no place there for base young men and elderly naves, no matter how thoroughly they have reformed. No hand of man can ever blot out that law of nature. "The sins of the fathers are visited upon the children."

Aqua Frio, Ariz.

KINDLY GREETINGS FROM A NEW CONTRIBUTOR.

REUBEN.

Dear Household: I, too, have long been an admirer of the Household. Have often thought how delightful 't would be to have the benefit of such a refined social circle, but for fear I would prove an unprofitable acquisition, I have foregone myself the pleasure. Mrs. Buchanan, after reading your interesting department of March 7th, I found myself seized by a new desire to undertake what seems a perilous adventure, earnestly knocking upon the door of your reception room that I may have the honor and pleasure of being an honorary member of the Household.

Now, please don't scrutinize too critically; I feel somewhat awkward in my appearance, but I trust all will remember that a country boy is not supposed to know how to present a "taking appearance" among well-trained society folk. I know I shall be greatly stimulated after enjoying the charms of your magnetic circle. Already I feel a new impetus pushing onward to a more successful life.

The Household department, under its present management, cannot fail to largely contribute towards making our homes better and society more just. Indeed, the value of Texas Farm and Ranch is greatly enhanced by the Household band. To know how to raise fine stock and till the soil more successfully is very unprofitable, unless its fruits can be enjoyed in a pure home. A pure home is the only substantial basis for every other advance in real life, both private and public. Mrs. Buchanan, editress of the two home departments is doing a great work. Her words and advice are all ways timely. No one can read her notes, even in Cousins' League, without seeing many sparks of wisdom, revealing a beautiful life, being well spent for the real good of mankind. Long live Mrs. Buchanan. May the influence of the Household continue to spread and grow in intensity till every home in our dear Southland has been warmed by its sunshine. Pardon me, perhaps have grown overzealous for a new comer, but all will agree that my words are justly bestowed.

Hurrah for Bartemus! he knows how to come up on the "blind side" of the

girls. Isn't he cunning in offering his advice to the girls. Reckon he thinks the boys don't need advice on getting married. I must believe Bartemus has a "selfish motive" in view. Of course all can excuse him for that. If there's any one with whom I can sympathize, 'tis an "old bachelor" deprived of the fair sex. I once tried eight months of bachelorhood, though I am not an old bachelor. Now, girls, if any of you ever expect to make anybody out of me, don't permit such a thing again, for I'd be past redemption. Indeed, this advice is not selfish, for I am looking to the interest of another, see?

Ah, me! I've forgotten myself, I fear, so I'll hurriedly make an exit, leaving my very best wishes to all.

Quannah, Texas.

"IS CHIVALRY DEAD?"

DAN FOX.

Don't know how this, my first offense, will be received. Don't know what welcome will be accorded the flag of a farm hand in your peaceful and entertaining port. True, I am not strictly a farmer; yet I am doing penal servitude, so to speak, for a dozen dollars per month and board—one meal per day and two during the night—for a bona fide farmer. I also churn and chop wood while I am resting. On Sundays, when I have done all the "things"—chores, the city farmer calls them—the day is mine to do as I please with. I generally please to repair to a contiguous drain, or draw, dignified by the title of creek, tho' it is dry nine months out of the year and frozen over the remaining three, where I laugh all day because it is Sunday.

Furthermore, in support of my flag, each Saturday afternoon my employer climbs on board an ante-deluvian mule, and goes gaily forth, a la one of Hester Kirk's Round Table errands, to the postoffice and store (a rope, soap and sorghum shebang) for the mail—consisting of Texas Farm and Ranch and a certain other Texas weekly (alas, how weakly!) publication, devoted principally to politics and the purse of the stock-breeders; and last, the general gossip of the neighborhood, including the latest sure cure for a farm afflicted with a severe case of Johnson grass. He also gets an occasional confidential communication from a "green goods" man in New York city.

"As per advertisement" at the top of my letter, I had intended to send some thoughts suggested by Hester Kirk's letter under same heading—touching upon the romantic Arthurian age, when all the Round Table knights were wont to ride and raid; "When lance shaft was splintered at gauntlet grasp and sword blade shivered at the hilt." Tracing chivalry from those stirring scenes down to that day when England's first Richard, he of the lion heart, did battle there by Acres and on down to its present resting place. But owing to the length of my letter, ere I could lead up to it, as it were, as well as my misgivings as to its reception, I'll bow myself out—going backward, for reasons obvious to all farmer boys whose mammas can patch.

Ronda, Texas.

"What kind of meat did you have for breakfast?" "I don't know." "Do you mean to say to the court that you don't know what kind of meat you had for breakfast?" "I do—it was sausage!"—Chicago Record.

Awarded
Highest Honors—World's Fair,
•DR•
PRICE'S
CREAM
BAKING
POWDER
MOST PERFECT MADE.
A pure Grape Cream of Tartar Powder. Free from Ammonia, Alum or any other adulterant.
40 YEARS THE STANDARD.

PILES Instant relief, final cure in a few days, and never returns; no surgery; no salve; no suppository. Remedy mailed free. Address, C. J. MASON, Box 515, New York City, N. Y.

WANTED AGENT'S To sell Sash Locks & Door Holders. Sample Sash Lock (free by mail for \$2. Stamp, Best sellers ever invented. Box weights \$12 a day. Write quick. **BROWARD & CO.**, Box 2, Philadelphia.

LOUISIANA RED HEART CYPRESS

Cisterns, Tanks and Water Troughs.
Write us for price list.

HOUSTON CYPRESS CISTERN COMPANY,
Office and Factory: Foot of Main St.,
HOUSTON, TEXAS.

Why Will Women Waste

Health, strength and time by the use of antiquated methods and devices in washing clothes? Thousands have caused doing so. They have discovered a better way, viz: the use of the Compressed Air Washer. We want good agents. If you can sell anything, you can sell this. Write for particulars.
THE COMPRESSED AIR WASHER CO.,
Box 90, Dallas, Texas.

FREE A GENUINE 14 K. GOLD-FILLED WATCH and chain to every reader of this paper. Out on contract and send it to us with your address and we will send you **FREE** for examination the Best and only Genuine American watch ever offered at this price. It is 14k. Solid Gold Filled, with Genuine American Movement, 20 Years' Guarantee, and looks like a Solid Gold Watch sold at \$40. Examine at express office and if you think it's a bargain, pay \$7.50 and express charges, otherwise pay nothing. A Handsome Gold Filled Chain, sold in certain stores for \$8.00 goes free with each watch.
ORDER GRADUALLY. FREE Chain, if you buy or sell SIX. Write to-day as this reward is good for 30 days only. **ROYAL WFO CO.,** 211 Culler Bldg., Chicago, Ill.

DO YOU LOVE YOUR LIFE?
Then save her strength, save her health, save her beauty and make her happy by buying her a **FAULTLESS QUAKER DISH WASHER.** It is a marvel of simplicity and wonder for utility, washes, rinses, dries & polishes in two minutes, costs a lifetime. It sells quickly. Everybody wants it when they once make money rapidly. Write today for terms, etc.
The Quaker Novelty Co., Salem, Ohio.

Liberal Views on the Bicycle Question
Right Prices on the Bicycle in Question

The Hawthorne—highest grade that can be \$25. Others, good enough for most riders, \$45 and less. Other Bicycles may be as good as THE HAWTHORNE, none can be any better. Our word for that. Do you care to pay \$25 or \$35 more for a "wheel" upon which higher praise could not be bestowed justly, than to say, "It is as good as 'The Hawthorne'." If not, send for our Catalogue. It is fully illustrated and typographically perfect book, that tells all about them. We'll mail it free for the asking. **MONTGOMERY WARD & CO.,** 111 to 116 Michigan Ave., Chicago.

Burlington Route
FAST THROUGH TRAINS DAILY,
St. Louis and Kansas City
TO
St. Paul and Minneapolis.
THE BEST LINE
FROM
ST. LOUIS AND KANSAS CITY TO
OMAHA, DENVER,
MONTANA, COLORADO, NE.
BRASKA, UTAH AND
PACIFIC COAST.
Vestibuled Trains with Sleepers, Chair Cars (Seats Free) and Dining cars.
Kansas City to Eastern Cities via Chicago or Peoria.
L. W. Wakeley, G. P. A.,
Howard Elliott, Gen. Mgr.,
ST. JOSEPH, MO.
L. J. Bricker, T. P. A.,
KANSAS CITY, MO.

that the numerous so-called varieties can be greatly reduced in number.

3. The best varieties of peas for vines and green manuring are the Unknown, Black, Clay, Red, etc., while the strictly bunch varieties, Whippoorwill, Blue, Black-Bye, etc., give larger returns in peas.

4. The composition of peas and pea vine hay exhibits large feeding values, as well as high fertilizing properties.

5. Cow pea vines can be converted into hay or preserved as silage, both of which are proven by repeated experiments to be palatable and nutritious food for farm stock.

6. The cow pea occupies the front rank among the leguminous plants as a soil restorer, enjoying largely the common property of this family of utilizing the free nitrogen of the air; an average pea crop accumulating over 100 pounds of nitrogen per acre.

7. A rotation of crops is imperatively demanded by scientific agriculture, and any system of rotation in the South which omits the cow pea is an egregious blunder.

8. A three years' rotation with five crops, two of which are cow peas, especially with appropriate fertilizer for each crop, has been found most effective in building up worn soils.

9. The proper disposition to make of pea vines is to convert into hay or silage feed for stock, carefully returning the manure therefrom to the soil. The digestive coefficients of peas and pea vine hay are high. In the absence of stock to consume the hay, the vines should be turned under.

10. The proper time to turn under vines will depend largely on soil and exigencies of the farmer. True economy would dictate the turning under in early fall, and the sowing of the ground later in some winter crop, small grain, grass or clovers, and these in turn to be buried if a spring crop be desired.

THE KENTUCKY SADDLER.

Southern Stock Farm.

I notice that there is a very good demand at present for gaited Kentucky saddlers, and when the spring opens up high prices should rule for this class of horses. As distinctively an American product as the trotter, the Kentucky saddler is, of course, an offshoot from the thoroughbred, and not excelled even for beauty of form or fineness of texture by that breed. Of later years the greatest skill has been brought to bear on the production of these horses and their numbers are rapidly increasing. Perhaps there is no more useful horse for the man of moderate means than the combined horse of this breed. Able to trot a smart clip, he looks well in harness, while his easy way of going makes him the most pleasant riding horse in the world. Some of them are able to jump nicely and to stand a hard day to hounds, but in many cases they have been bred a trifle fine for real hard cross-country work with weight up. This has been noticed, and from this on we may expect to get more substance than we have hitherto had in the Kentucky saddler. The association which was formed for the purpose of conducting a pedigree record for these horses has fallen on what may be termed evil days. Last year about this time Gen. John B. Castleman was president of the association, which he was clearly entitled to by virtue of his great services to the breed, both at the shows and in private life. A man of prominence and great wealth, General Castleman is a right good judge of a horse, and his beautiful exhibits at the Columbian and National shows will not soon be forgotten.

The managers of fairs, especially those held in metropolitan places, and in districts where the gaited saddler is bred, should not fail to make an exclusive class for these horses this season and perpetuate it in their premium lists. The Kentucky saddlers are as worthy of recognition as any other sort of horse, and as much money can be had for good specimens as for almost any other sort of utility horse. I knew a horse of this sort that was, I think, the very best I ever rode. He stood sixteen hands high, was a hard colored brown with two white ankles and a narrow, irregular stripe in his face, and was, with the exception of a rather short neck, a perfect beauty to look at, and he was in very truth a 'good 'un to go.' Take him on the curb and he could go all the gait; on the snaffle he was all walk, trot and canter, and give him his head he could run a mile in 1:45 or better with about 155 pounds on his back. He could jump like a deer and in harness he could trot about a four-minute gait. He did not like the



HAVE YOU ONE OR MORE COWS?

If so, whether for pleasure or profit, household or dairy, you should know of the CENTRIFUGAL CREAM SEPARATORS.

The De Laval Separators save at least Ten Dollars per Cow per year over and above any other Separator or Creaming System. All other Separators are merely inferior imitations or infringe the De Laval patents. Many users have already been enjoined. SEND FOR CATALOGUE and any desired particulars. SATISFACTION GUARANTEED as a condition of sale.

BRANCH OFFICES: THE DE LAVAL SEPARATOR CO. 74 Cortlandt St., New York. ELGIN, ILL.



feel of harness over much, but he went along all right, and never to my knowledge made a mistake. Now, it seems to me that a breed in which such horses are to be found deserves all the assistance that can be given it, for it is a genuine pleasure to either ride or drive them, and larger prices will always be found for such accomplished animals. This horse of which I am speaking was as good a light-weight hunter as I ever saw in England, Scotland, America or any other country, and on dress parade he was just as good. With plenty of practice he would have been a winner in any ring of gaited saddlers. My conclusions are, therefore, that the managers of fairs must assuredly offer very substantial prizes for this breed from this on, and the breeders will serve themselves best by making liberal exhibits. Fashion may in the East have declared against the gaited Kentucky horse in favor of the short-tailed saddler of the English pattern, but most of these horses will trot and canter as well as any other beast that can not get the gaits, and the devotees of fashion may take my word for it that there is nothing much more pleasant when coming home from a twenty-mile run than to have one's horse to change from the trot to a smooth rack. It affords an immense amount of relief to the tired muscles possessed by horse and rider. I was brought up with the walk-trot-and-canter sort, and like them still, but I am perfectly free to admit the superiority of the gaited Kentucky horse."

RAISING THE CALF.

Farmer's Voice.

It is of the utmost importance whether the calf is raised for the dairy or for the butcher that its digestion be kept in perfect condition the first year of its existence, so that it may become a profitable animal. To do this it is necessary to feed carefully and keep the calf supplied with a sufficient quantity of food to make it quiet and satisfied. It is desirable, of course, to keep the calves pushing ahead, but it is best to make haste slowly. In your eagerness to show growth, do not overfeed, or you will upset the digestive apparatus and check development for a time at least.

Determine the destiny of the calf, and feed accordingly. If a heifer, and you are raising it for dairy purposes, do not feed too much fattening food, says a writer. If the heifer once acquires the habit of putting everything on her back it is practically impossible to induce her to change in favor of the milk pail. Cows are just as much creatures of habit as men are, and we all know the difficulty of reforming our ways. Therefore, train the heifer in the way you wish her to go. Give her such food as will promote rapid growth. Bone and muscle are the points to be aimed at. A fat heifer is apt to divert into flesh the food intended for the production of milk. Therefore, corn meal, timothy hay and other carbonaceous foods are to be eschewed. Oats, clover hay, wheat bran, etc., will do much to stimulate milk production. A few carrots or other roots will give the occasional zest required by the appetite.

In the case of the Kansas City Hay Press Co. vs. H. F. Devols et als., in the U. S. circuit court for the western division of the Western District of Missouri, the bill of complainant company was dismissed at complainant's cost, Judge John F. Phillips, presiding.

If you want a first-class Jersey cow, write to Farmer Shaw, Dallas, stating full particulars. He will send you a long list of pedigrees to select from.

W. S. Ikard, of Henrietta, Texas, offers for sale a fine registered five-year-old Holstein bull, and two-year-old heifers in calf by said bull, for \$60 each; cow in calf, \$80; bull yearlings, \$50. All f. o. b. cars at Henrietta.

Farmer Shaw, Dallas, can sell you as good a Berkshire pig as can be found anywhere. Write him for particulars.

WANTED Agents and Salesmen, \$15 per week easily made. Capital free. Send stamp for particulars. CHICAGO STOCKMAN, Chicago, Ill.

DURO-C JERSEY SWINE. Young stock for sale. Correspondence solicited. FRAZIER & ANSELL, Kopper, Bosque Co., Texas.

WOOL

Always bought at highest market prices by GUIDO MOREYUS, Monterey, Mexico.

Berkshire, Cheviot, White Jersey Red & Poland China Pigs. Jersey, Guernsey & Holstein Cattle. Thoroughbred Sheep, Fancy Poultry, Hunting and House Hogs. Catalogue. S. W. SMITH, Cochranville, Chester Co., Pa.

...LAWN FARM...

Jersey Cattle. Berkshire Hogs. A few young registered Berkshire hogs old enough for service. Will be sold at pig prices if taken at once. In fine condition and royally bred. PLATTER & FOSTER, Denison, Texas.

Thoroughbred Pigs: Poland China & Berkshire. The best strains of both these famous breeds are represented in our herd. Prices reasonable. Correspondence solicited. Address RAGLAND & DAVIS, Pilot Point, Tex.

BULLS FOR SALE.

I have for sale one hundred Shorthorn bulls (Texas raised) at my breeding farm, 12 miles north of Fort Worth. J. W. BURGESS, Fort Worth, Texas.

WILKES STALLIONS FOR SALE.

Two Standard and registered Wilkes stallions for sale cheap. Also mares, colts, fillies and geldings at prices to suit the times. For information address W. C. LEONARD, Lawrence, Texas. Or JNO. Y. ROBERTSON, Dallas, Texas.

DAIRY STOCK FOR SALE.

About seventy head heifers and cows, ½ to 15-16 Jersey. Will sell in lots to suit purchaser, and at bottom prices, if you want good milk cows cheap, write now to W. R. CAVITT, Bryan, Texas.

J.I.C. DRIVING BIT Still King THE BIT OF BITS. Will control the most vicious horse. Sales less than Ever. Sample mailed XC for \$1.00 Nickel, \$1.50. Stallion Bits 50 cts. extra. RACINE MALLEABLE IRON CO., RACINE, WIS.

The Clifton Herd Holstein Cattle

One hundred registered Holstein-Friesian cattle, fully accredited. All matured cows, on the advanced register, with individual butter records running from 12 to 28 pounds in 7 days test. This great herd took milk, butter and class premiums at the Dallas State Fair 1900, 1901, 1902, and 1903. A large number of high bred, young Texas raised bulls and heifers for sale. Also Berkshire pigs. Prices reasonable. Address CLIFTON STOCK FARM, Dallas, Texas. W. E. HUGHES, Proprietor.

THE Cotton Belt ROUTE THE ONLY LINE

Operating Through Coaches, Free Reclining Chair Cars and Pullman Sleepers between prominent Texas points and Memphis.

SOLID TRAINS

Ft. Worth, Waco and intermediate points to Memphis, and Pullman Sleepers to St. Louis, making direct connection at both cities for all points North, East and Southeast. The best line from Texas to all points in the Old States.

Rates, Maps, and full information will be cheerfully given upon application.

A. A. GLISSON, S. G. WARNER, T. P. A., Ft. Worth, Tex. G. P. A. Tyler, Tex.

E. W. LABEAUME, G. P. & T. A., St. Louis, Mo.

TAKE THE

Santa Fe Limited

Santa Fe Route.

TO ALL POINTS—

EAST or NORTH.

Quickest and Best Train

Dallas to St. Louis,

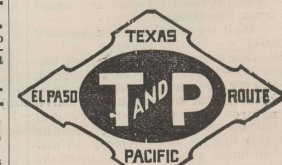
—AND—

Dallas to Galveston.

23 Hours Dallas to St. Louis.

13 Hours Dallas to Galveston.

Through Buffet Sleepers and Free Reclining Chair Cars on all trains. For tickets and further information call on or address any Santa Fe agent, or W. S. KEENAN, G. P. A., Galveston.



—OFFERS THE PUBLIC THE—

Best Passenger Service

BETWEEN

TEXAS, THE EAST AND SOUTHEAST.

Cannon Ball Train

SHORTENED ONE HOUR IN TIME.

Leaves Fort Worth, 7:05 a. m.; Dallas, 8:05 a. m.; Union Depot, 8:15 a. m. Arrives St. Louis, 7:25 a. m. next day.

Limited Evening Express

Has Been Quickened

9 HOURS TO ST. LOUIS AND THE EAST.

4 HOURS TO MEMPHIS.

1 HOUR TO NEW ORLEANS.

ONLY TWO DAYS

Between

TEXAS and NEW YORK

Pullman Buffet Sleeping Cars to St. Louis, Chicago and New Orleans, and Pacific Coast.

Through day coaches each way between Fort Worth and Memphis.

For tickets, rates and further information call on or address your nearest ticket agent.

L. S. THORNE, 3d V-Pres. & Gen. Manager.

GASTON MESLIER, Gen. Pas. & Ticket Agt., Dallas, Texas.

W. A. DASHIELL, Traveling Passenger Agent.

streets were thronged with men, women and children, and the show grounds were packed with people, and every one seemed to be surprised at what they saw—fine horses, fine cattle, fine hogs and fine chickens. There were of horses, jacks and mules, an exhibition of 35 head, of cattle 20 head, of hogs 49 head. I did not get the number of fowls, but the exhibit was a good one, both in quality and quantity.

I am pleased to say, with no desire to especially please or flatter any one, that the hogs were all good, and some of them, if put in proper condition and brought to the next Dallas fair will stand a good chance to wear off some blue ribbons. But, my beloved, let me warn you now that they will have to be in much better condition than they were at Brownwood.

The cattle exhibit was of Holsteins, Jerseys, Short-horns and Herefords. They were a credit to the gentlemen who showed them, as was also the horses and jacks.

Uncle Snort judged the chickens, and of course tied a blue ribbon on every coop because he knows that all chickens are good, and that every one who has pluck enough to raise and exhibit fine chickens ought to have a blue ribbon.

At 11 a. m. Saturday a large congregation of ladies and gentlemen gathered at the court house to hear the address of welcome by mayor Smith and a talk by Uncle Snort on the "Improved Hog," and also a talk by D. O. Lively on "The Best Methods of Fattening and Marketing Live Stock." Mr. Lively made a splendid talk which was full of good sense and sound advice which was well received and heartily enjoyed.

In the evening J. L. Ray, master of the State Grange, made a good talk on "Organization."

The Brown county people deserve much praise for the show and the enthusiastic interest manifested in it. Will Mayes, the editor of the Brownwood Bulletin, the secretary of the Live Stock Show, was the right man in the right place and deserves much credit for the faithful work which he did. But it was hard to tell who of Brownwood's leading men took the greatest interest in the good work. I was so royally treated while among those people that I shall never cease feeling good toward them and rejoicing in their prosperity, and I can now of a truth say that it is my opinion that in the near future Brown county will be another one of the best counties in Texas, and one of the reasons why I think so is because of every man, woman and child in Brown county reads Texas Farm and Ranch.

Uncle Pierce McKinney told me of a new breed of hogs they have out in that country. He says they are the "By-field" hogs. They lie by the field until they shrink sufficiently to creep through the fence into the corn fields and destroy the corn, hence they are called "By-field" hogs. He further stated that there are times out in that country that the drouths are so severe that they often have to throw their hogs into the river and soak them or they won't hold slop. But with all of these things Brown county is a grand county and there is more real pleasure to the square inch there than I have found in any county in Texas.

Say, when you have another live stock show, let me know—I'm coming.

UNCLE SNORT.

FROM THE COAST COUNTRY.

Acadia, Texas.

Editor Texas Farm and Ranch:

The tide water country has had too much rain for the past three months, and consequently farmers and truckers are late with their crops. According to weather reports we have had about twenty-five inches of rain since the middle of November. The strawberry crop (one of great importance) can do the work of four, there has been an effected saving of one hundred million dollars annually.

I haven't the least doubt but that it is costing the farmers of this grand old state of Texas all the way from fifteen to twenty million dollars annually to transport their products to market more than it would if our roads were improved properly. And such improvements would add untold millions to the value of farms. I am well aware that lands on muddy roads cannot be sold while those on well improved roads have increased in value from twenty dollars all the way to five hundred dollars per acre.

Then, will it pay to build good roads?

well. The great stringency in money matters has stopped the planting of new orchards to a considerable extent. The wet winter may prove a blessing in disguise to coast farmers, as it has taught them the necessity of a more thorough drainage, and the result is some great canals will be opened around Alvin and other coast towns, at once, under our new drainage law.

A very extensive canning, evaporating and preserving factory is being erected at Alta Loma, two miles east of Arcadia, and will be in position to handle the late spring crop. A good roads convention will be held at Exposition building, Dickinson, April, 2d and 3d, for the purpose of promoting plans, ways and means for the betterment of our roads.

There is a project on foot to establish a military school at Arcadia, on the plan of the Bingham school, of North Carolina. This is an excellent location for such an institution, as the climate and healthfulness of the country are favorable, and the location being midway between two great cities from whence it would draw a liberal patronage. The establishment of a normal school at Alvin is now considered a certainty, and with the two coast country will be fixed for schools.

ALF. H. H. TOLAR.

FROM BAYLOR COUNTY.

Seymour, Texas.

Editor Texas Farm and Ranch:

While reading articles sometimes about growing and cultivating crops, this is all in place, but it will not hold good everywhere. There is a large difference between Collin and Baylor counties, also Deason and Western Texas. Timber counties always will have more rainfall than barren, without timber. So every farmer, no matter where he lives, must use his own judgment in these depressing times. Our soils will produce good crops with plenty of elbow grease. Stir your soil to encourage moisture; also use brain work. It is not only the lawyer or merchant, but the farmer also. We must diversify our crops. Russia, India, and Argentine are getting ahead of us in producing wheat. Cotton, with over production this year, will bring four to five cents. One thing is certain, Texas has made a wonderful record in the raising of hogs in 1895. Even farmers in this county of Baylor are fully awake. It has made wonderful strides the last year. The time has passed when the farmer has to raise cotton to buy his bacon with. Baylor county shipped some very heavy hogs this year to Fort Worth, weighing from 500 to 700 pounds. What we need is more farmers who read the great paper, Texas Farm and Ranch. It is an instructor and educator.

MICHAEL HILTI.

ROAD IMPROVEMENT.

Wilmer, Texas.

Dear old Farm and Ranch, I have been reading your columns for years and enjoy them very much, and as I see some of your writers are saying something on the road question, I will confine my remarks to that subject.

This is a subject worthy of attention and should interest all tax payers. That there is no tax so great as that of bad roads is a generally accepted maxim and it is very true.

In the first place all teams that we use in transporting over roads have to be fed, and oft times on account of bad roads they cannot be used, and the average cost of keeping a horse is \$125 per year. And now if the road surface be made harder by metaling it, then one horse can do the work of two, and the feed and interest on one is saved. I see, in reading English literature, it is estimated in that kingdom that the saving in cost by reducing their roads to such a condition that three horses can do the work of four, there has been an effected saving of one hundred million dollars annually.

I haven't the least doubt but that it is costing the farmers of this grand old state of Texas all the way from fifteen to twenty million dollars annually to transport their products to market more than it would if our roads were improved properly. And such improvements would add untold millions to the value of farms. I am well aware that lands on muddy roads cannot be sold while those on well improved roads have increased in value from twenty dollars all the way to five hundred dollars per acre.

Then, will it pay to build good roads?

By referring to the precedents of other countries we are bound to admit that it will pay. If it will not, why do we find England, Germany, France, Switzerland, Norway, Sweden, and almost all civilized countries building the best roads they can in the face of difficulties which to us would be appalling? The poor Swiss have built roads through gorges and around precipices, which would seem impossible and which must have cost over a million dollars per mile. But in this favored country of ours the cost needs to be but small comparatively speaking. The probable cost of building roads in Texas would range from \$2000 to \$10,000 per mile. It would be governed by the dimensions and character of methods, soils grades, drainage, etc. Very fair roads, under favorable conditions, could be built for \$3000. But I should say with rolling topography, varied soils, and fair material, they should not exceed seven thousand dollars per mile.

That the readers of your valuable paper may better comprehend the importance of the problem, let me define what a road is: It is a line of communication and the ideal aim is a line of least resistance, level, straight, hard, and smooth as possible—that is, with due regard to the traffic. This fact will be more fully appreciated when we remember that to pull a load of one ton on different surfaces require different powers, as I will state in the following figures:

	Lbs.	Cost
To pull one ton on sand requires.....	400	40 cts.
" " " " " hard earth.....	200	20 "
" " " " " macadam.....	100	10 "
" " " " " wooden blocks.....	50	5 "
" " " " " bricks.....	25	2 1/2 "
" " " " " asphaltum.....	10	1 1/4 "
" " " " " iron trans.....	10	1 1/4 "
" " " " " steel rails.....	9	9 "
" " " " " water.....	2	2 "

And the farmer, above all men, should be the more interested in the building and maintaining good roads, inasmuch as he has to haul everything which he uses over the roads to and from the markets. And it is easily seen that he pays more for his transportation than anyone else, because of the resistance offered by the earthy, sandy, hilly or muddy roads.

Hoping that you will print this in the interests of good roads, I will close.

W. A. ORR.

INFORMATION WANTED.

Pittsburg, Texas.

Editor Texas Farm and Ranch:

I noticed an inquiry in your paper of recent date from a Mr. B. Foster of Alvin, Texas, about Mexican June corn, asking if it were the same as Tucson corn, raised in the coast country, adjoining Alvin. Would be glad to hear from some of the many readers of this paper on this subject. What about it? Is there a similar corn of another name? If so, the readers of this progressive journal should know it, by all means. There is no doubt many would plant who do not if it were not for the fancy price of \$4 per bushel. We intend to try this Mexican June corn this season on oat land after oats are harvested, if seed are attainable in sufficient quantity and at reasonable prices. Will it do to depend upon in this part of the state? Hope to hear from some one through this paper who has experience with this corn.

R. E. MOORE.

FINE HOGS IN GRAYSON COUNTY.

Pottsboro, Texas.

Editor Texas Farm and Ranch:

I enclose you matter for a change of ad. I got letters from all over Texas, and some from the Southern States, and have received one from Mexico. So it seems that you do not confine your self to a small country like our great State. You spread yourself out, as I did when I went up to the St. Louis fair last fall and bought the big Poland-China winners. I told the boys there was nothing too good for Texas, and that I came after the winners, for we needed big hogs in our business. I have done as well as could be expected, have had six sows to farrow in the last two weeks forty-five pigs, forty of them living and doing very well. Two of my premium sows have farrowed, one brought six pigs, from Catcher, and the other eight from Texas Claus. All living and doing well. Will have several more sows to farrow about the first of April. I will have pigs from five great boars. Shortstop, the hog that won sweepstakes on boar and three of his get at the World's Fair, and his get have won at nearly all the state fairs. He is the sire of my big boar, Catcher, that won sweepstakes and class and

headed sweepstake herd at St. Louis Fair last fall. Will have lots of pigs from him. Have pigs and young sows by Texas Claus—sire, Claud, the great sweepstakes World's Fair winner. He is a Tumesh on dams side. Have pigs from Erie Short Stop that headed young sweepstake herd at St. Louis Fair last fall. His grand sires are Guy Wilkes 2d and Short Stop. Then I have sows by Texas Claus, Short Stop, Sportsman, Roy Wilkes, J. H. Sanders, the hog that won in aged class and headed old sweepstake herd at World's Fair, Ideal Black U. S., Tumesh Price, besides quite a number of others of not so much note. I think I have a herd second to none in the South.

Tell Uncle Snort that my friend that raised the pig in the pen made it dress 435 pounds at 13 months old, is the correct statement and that he used but little grain or bran of any kind until a few months before killing. He fed it on slop from kitchen and in spring and summer had it fed pursley and hog weeds. I let him have another pair last fall and he says he will make 1000 pounds of pork from the two at 15 months old. So you see, Uncle Snort, that most every reuter can raise his own meat if he only will.

We have a swine breeders association organized in Grayson county and several good herds starting up.

C. W. THOMAS.

GOOD ROADS FOR THE COAST COUNTRY.

Alta Loma, Texas.

Editor Texas Farm and Ranch:

The coast country is the finest adapted country for making easy and good road beds in the state of Texas, and our county, Galveston, has made and is making very good progress in this direction, but the building of road beds receives the same fate in the majority of cases, as our coast lands, that are trying to be tilted without first guarding against the known cause of destruction—the complete submerging of the lands with water. The average tiller becomes discouraged by this repetition; so likewise does our county road and bridge committees, of work that has received their approval, and will continue so just as long as the requisite alternative is not provided for—drainage. First make the proper disposition of the water that acts as a destroying element, then a system of good roadbeds can be easily perfected in our coast country. Canals, then roads, is the proper way to begin. If convict labor can be used in our coast country in perfecting a drainage system then a greater benefit will have been accomplished for the state of Texas than deep water at Galveston. The climate and the texture of the land is all favorable for this method to be put into execution, and would redound to the good of the state in a ten-fold ratio greater than any other achievement with her convicts. CITIZEN.

I have been a subscriber to your paper for some time and am well pleased with it. I think it the best agricultural paper published. I wish every farmer in Arkansas would take it and profit by its teachings. I admire the bold and fearless tone of its editorials. They have the true American ring. Mrs. Buchanan's departments are splendid. Such writers as Leo Jenewyl, Minnehaha, Grace Lunar, and many others, will always make that department popular among the ladies. I like Uncle Snort's letters, but I think he is a little hard on the Eastern states. I guess when he, Snort, started to Atlanta he got a piece of black wax laid stuck in his eyebrow and he couldn't see anything else while he was gone.—C. A. Gunter, Fairplay, Ark.

"What can your sex do, madam," asked the cynical caller, "in case it becomes necessary to nail a campaign lie?"

"We may not be able to nail it, sir," replied with dignity the new woman who had gone into politics, "but we can punch it full of holes with a hat-pin."—Chicago Tribune.

"Am I right in supposing that strong drink brought you to where you are?" asked the sympathetic person. "I guess you air," admitted Mr. Dismal Dawson. "I'd just as soon stay in the country as in town, 'ere there was only booze to be had."—Indianapolis Journal.



All genuine Spooner Horse Collars have this trade mark. All others are imitations and of inferior quality.

WELL DRILLING MACHINERY
(MANUFACTURED BY)
WILLIAMS BROTHERS.
ITHACA, N.Y.
MOUNTED ON OR SILLS, FOR
DEEP OR SHALLOW WELLS, WITH
STEAM OR HORSE POWER
SEND FOR CATALOGUE
ADDRESS WILLIAMS BROS. ITHACA, N.Y.

W. S. MARSHALL,
HYDRAULIC ENGINEER,
Fort Worth, Texas.
Irrigation Works a
Specialty. Correspondence solicited.

LIGHTNING WELL MACH'Y
PUMPS, AIR LIFTS,
GASOLINE ENGINES.
CIRCULARS FREE
THE AMERICAN WELL WORKS.
AURORA, ILL. - CHICAGO - DALLAS, TEX.

Portable Well Drilling
MACHINERY
Established 1867. Covered by patents.
Machines drill any depth both by
steam and horse power. We challenge
competitions. Send for free
illustrated catalogue.
Address, **KELLY & TANEYHILL,**
WATERLOO, IOWA.

UTTER MANUFACTURING
COMPANY,
Rockford, Illinois.
Manufacturers of
WELL-DRILLING
MACHINERY
And Well-Drilling Tools
of all kinds.
BEST MANILLA
Hawser-Laid Rope
Always in stock.

GENERAL AGENTS:
SMITH & CORBIN, Belton, Texas.
LOUIS HENNE, New Braunfels, Texas.

SORGO MILLS
And Railway Evaporators
At Greatly Reduced Prices.
Upon receipt of 8 cents in currency
or postage stamps (to pay postage)
we will forward by mail one pound of
(tested) Early Amber Cane Seed free
to every applicant. Send for circular
and price list to

WINCH.
Either single or double geared. For
raising wind mill towers, moving and
hoisting safes, moving buildings and
other like work.
UTTER MFG. CO., Rockford, Ill.

WINCH.
Either single or double geared. For
raising wind mill towers, moving and
hoisting safes, moving buildings and
other like work.
UTTER MFG. CO., Rockford, Ill.

SENSIBLE ECONOMIES.

K. Johnson, in Journal of Agriculture.
One of the wisest of these is to keep
an accurate expense account, and know
each week where your money goes.

A knowledge of the uses of screw-
driver, hammer, saw and soldering iron
would be no harder to acquire than
very much of that which you do, and
would save many dollars. It would also
make many a woman happy who now
feels harassed and burdened with these
numberless small trials.

Besides the economy of making pur-
chases at wholesale earnestly recom-
mended that the knowledge of how to be
a "universal tinker" for the home, there
are many articles of consumption in
a family which can be manufactured
at home at a decided saving in their
cost.

To make lemon extract, select a par-
ticularly clean, oily-looking lemon,
with a sharp knife pare it so thin that
not a particle of the white rind will
come off. The oil is contained in the
thin yellow rind; the white is bitter and
will positively spoil the extract. It is
preferable to pare rather than to grate
it off. Put a pint of best alcohol in a
glass fruit can, add rinds, shake occa-
sionally and in two weeks you will
have a better extract than you can ordi-
narily buy for three times what it cost.

Extract of vanilla can be made with
perfect success by purchasing vanilla
beans of some reliable druggist, cut
them in small pieces and place immedi-
ately in the bottle, covering with the
best alcohol; cork tightly, stand in a
warm place, shake occasionally for two
weeks, then drain off carefully.

Extracts of nutmeg, mace, cinnamon
and ginger can be made in the same
way, by bruising them and putting
about two ounces to a pint of pure
spirits of alcohol.

To obtain extracts of fruits as peach-
es, pineapples, strawberries, etc., take
equal parts of alcohol and water, using
sufficient to cover them. In a short time
you will have the flavor and juices of
the fruit.

Spirits of camphor are made by add-
ing camphor gum to pure alcohol. Cam-
phor water is made by first putting a
few drops of alcohol to camphor gum;
rub the camphor fine, and then work it
up with a little carbonate of magnesia,
and gradually add pure snow or rain
water.

THE COLORADAN'S FATE.

New York World.

A Colorado boomer died (no matter
what the day or date), and when he
reached the portals spied St. Peter sit-
ting at the gate. From out beneath his
shaggy brows the good saint eyed the
coming guest, who with true Chester-
fieldian bows his honor of the saint
expressed. He said he had grown tired
below; his brain was wearied with its
cares; the struggle was a hard one, so
he thought he'd climb the golden stairs.
St. Peter asked the man his name, his
occupation down below, and what creden-
tials he could show, and then, with the
discretion rank, ne'er dreaming of the
fruit 'twould bear, he asked the dis-
embodied crank how things in Colorado
were. This question never yet has
failed to start the Coloradan tongue,
and saintly ears were soon assailed
with wildest anthems ever sung. He
told of Texas and snails and venis, of
tunnels, slopes and fissures true, of
mammoth strikes and golden gains, un-
til the heavenly air was blue. With
growing eloquence he sped along the
oratoric track, with gestures of both
hands and head, and frequent bowing
of the back, till Peter's ears began to
ache, and "that tired feeling" came to
him, yet still the Coloradan spoke his
little piece with added vim. At last
forbearance ceased to be a virtue, and
the saint arose, believing that his
guest would see that the interview was
at a close. Then grabbed he Peter by
the robe, and talked and talked again,
until the patience of a Job would not
have stood the trying strain. In des-
peration Peter threw the golden gate-
way wide ajar, and said unto him: "If
you'd view the heavenly glories, there
they are!" The Coloradan stepped in-
side, gazed on the streets of shining
gold, and in a business manner eyed
the buildings of unequalled mold. The
dazzling beauties one and all he stud-
ied; then, with shake of head and con-
centrated Western gall, turned to the
waiting saint and said: "Just as de-
scribed in Holy Writ; and I confess it's
mighty sleek; but I just want to say
that it ain't in it, sir, with Cripple
Creek!" Then Peter seized him by the
neck and the bottom of the spine, gave
him one vigorous, saintly kick and
shot him down the dark incline; and as

the body downward sped old Peter
gave his ears a rub, and with most
touching pathos, said, "I pity old
Beelzebub!"

THE VALUE OF REFORM.

The temperance apostle was walking
along the pavement, serene in the con-
sciousness of his own goodness, when a
well dressed man stopped him and
shook his hand.

"You don't remember me," said the
well dressed man.

"Why—ah—"
"Three years ago I attended one of
your meetings, and I heard you draw a
graphic picture of the able mechanic
whose children went ragged, while the
children of the saloon keeper, with
whom he spent his wages, were dressed
in silks. The story fitted my case to a
T."

"And you reformed?"
"Should say I did reform. Went into
the saloon business myself."

Free—"good advice." Are you afflict-
ed with Headache, Dizziness, Faintness
at the stomach, Pains in the Back, Fe-
male Weakness? If so, we want you to
try Dr. Simmons' Sarsaparilla, we know
it will benefit you and 50 cents for 50
doses.

IN TEN ANNUAL PAYMENTS.

Only 7 Per Cent Annually On Unpaid
Balance.

"Get a move on you." 5,000 acres in
improved farms at \$8 to \$20 per acre,
on above terms. Good prairie land,
with plenty of timber and water. See
J. W. Wells, on premises, four miles
north of Prairieville, Kaufman Coun-
ty, Texas.

"One of the ironies of life," says the
Manayunk Philosopher, "is the fact
that the man who has enough money to
pay as he goes can get all the credit he
wants."

"What makes you so unhappy,
Maud?"

"I proposed to Harry Duane, and he
refused me!"

"Did he give any reason?"
"Yes; he said it wasn't sudden
enough."—Detroit Free Press.

"ALMOST LIKE THE STANDARD."

When a dealer finds himself reduced
to but one item of merit in the Cultiva-
tor he is trying to sell, and that one
item is, a slight general resemblance
to the Standard Cultivator, it becomes
both laughable and pitiable.

"Almost like the Standard," is their
one reason why a purchaser is expected
to buy their goods. Such men would
say to one who wanted to buy a new
milk cow, "Don't you do it, I can sell
you an ox for less money, and my ox
looks almost like a cow, any way."
There can be no very good reason for
buying imitation goods. They are, for
obvious reasons, never so good as the
original.

EPIWORTH LEAGUE IN SAN ANTONIO.

Low excursion rates (five dollar
maximum) will be made to San Anto-
nio and return April 13th and 14th, ac-
count Epworth League State Conven-
tion, by the I. & G. N. R. R. Call on
agent for full particulars.
D. J. PRICE, A. G. P. A.,
Palestine, Texas.

IT DONT MAKE ANY DIFFERENCE

Whether you are for a gold standard
Or for free silver
Or a bimetalist,
Or even a greenbacker,
You would like a gold mine.

There are lots of them at Cripple
Creek just waiting and anxious to be
discovered by Texans.

Perhaps you will get one
If you will join the Rock Island Ex-
cursion leaving Fort Worth for Cripple
Creek, Tuesday, April 7th.

The price is only one fare for the
round trip.

Tickets are good thirty days for re-
turn.

Pullman Sleepers on the train, like-
wise Free Reclining Chair Cars.

For further particulars address,
J. C. McCABE, G. P. A.,
Fort Worth.

I X L THEM ALL.
QUALITY TELLS
THE BEST
STEEL MILL.

STRONGEST STEEL TOWER. No long story
here. Send for catalogue and prices.
PHELPS & BIGELOW WIND MILL CO.,
Kalamazoo, Michigan.

OUR WOOD WIND MILL
In constant use 25
years and still
leads.
The well known
endurance of this mill makes
a constant demand for it. It
leads by its superior power,
wheel, radiator, regulator and
showers. We make steel mill
towers too. Our catalogue tells you all.
PHELPS & BIGELOW WIND MILL CO., 19 Race St. BOSTON, MASS.

**THERE IS MORE
WIND
USED**
By some manufacturers and
dealers in selling their goods than
it would take to run the 35,000
DANDIES that are now in daily
use in all parts of the civilized
world. Drop us a line and we
will back our assertions with
prices bound to convince that we
have the right kind of goods to
blow about. We carry everything
needed for pumping or power
work.
**Challenge Wind Mill & Feed Mill Co., Dallas,
Factory, Batavia, Ill.**

**THE GENUINE
BUCKEYE
FORCE
PUMP.**
Has no equal. Works easy and throws a
constant stream. Never freezes. Over
300,000 in use and giving universal sat-
isfaction. Send for circulars and prices,
giving depth of well. Beware of imitations.
Galvanized Steel Wind Mills and
Steel Buckeyes, Iron Turbine and
Columbia Steel Wind Engines,
Power Mills, Well Drilling Ma-
chines, Tank and Spray Pumps,
Buckeye Lawn Mowers, Iron
Fencing, etc.
MAST, FOOS & CO.
SPRINGFIELD, OHIO.
PARLIN & ORENDORFF CO., Agents,
Dallas, Texas.

**THE GREAT
ROCK ISLAND
ROUTE**
CHICAGO, ROCK ISLAND AND TEXAS
RAILWAY IN CONNECTION
WITH THE GREAT
ROCK ISLAND
ROUTE.

This map shows a modern "up-to-date rail-
road," and how it has its own lines to the
principal large cities of the West. It is the

"Great Rock Island Route,"

And has double daily fast express train ser-
vice from Texas as follows:

No. 2 Lv. Fort Worth.....10:40 a. m.
Ar. Kansas City.....8:20 next a. m.
No. 2 Lv. Fort Worth.....8:10 p. m.
Ar. Kansas City.....5:25 p. m.
Ar. Chicago.....9:25 next a. m.
Ar. Denver.....7:25 a. m.

Through Pullman Sleepers and Free Reclin-
ing Chair Cars.

Don't overlook the fact that Train No. 2
saves you a whole business day en route to
Denver or Colorado Springs.

Your local ticket agent will probably want
to sell you a ticket via the Rock Island, but if
he don't—insist until he does.

J. C. McCABE, G. P. A.,
Fort Worth, Texas.

VETERINARY.

When veterinary advice is desired by mail and without delay, Dr. Folseiter (Dallas, Texas) should be addressed directly, and one dollar enclosed to secure prompt attention. Queries addressed to TEXAS FARM AND RANCH for publication will be answered, each in turn.

I had a horse that was sick this morning (March 26). His symptoms I thought to be staggers, as he would walk in a circle, and against trees and fences. I doctored for staggers, giving black draught and salts to open his bowels, but did not succeed. I let him inhale ammonia and bathed his head in turpentine and chloroform, which made his nostrils run a yellow water that seemed to relieve him a little while, but he got worse and died at five o'clock the same day. I dissected him and found nothing wrong with his head or brain that I could tell, but his bladder was as full of water as it could possibly be, also his bowels were very watery; his stomach had very little in it. He could neither have actions on his bowels nor kidneys. Please tell me what was the matter with him and what I should have done for him.—D. M. DENISON, Boonville, Texas.

Ans.—Your horse had staggers. You should have given him a pint or two of raw linseed oil. Injections of warm water slightly salted, and bathed his head with cold water and kept him from bruising or hurting himself if possible.

I have a cow three years old with first calf; brought the calf March 28. She don't give milk out of right front test, but it is about the same size as the others. There is a gristle in the test, and that part of the sack is caked a little more than the other, but no more than common. Give the cause and remedy. She is hearty and healthy.—J. M. BEEZLEY, Kellogg, Texas.

Ans.—There seems to be some kind of a growth obstructing the milk canal in the test. It might be removed by a surgical operation. If you can get a surgeon to examine it and operate on it, do so; if not, let it alone.

We have a horse that his right hip is perishing. Some call it wind sweeney. On same leg on ankle joint is wind galls so touch. He is nine years old, hearty in very good fix and seems to be in good health except trouble named; is not lame; have worked him all the spring. Will you please tell me through Texas Farm and Ranch what is the matter with him and what will cure him?—W. A. ROGERS, Merket, Texas.

Ans.—If your horse is not lame let him alone. If he gets lame apply a cantharidine blister to the ankle.

Would like for you to tell me what to do for my cow. I have a mare that raised a calf and I could never get any milk out of one of her front teats. She has just brought another calf and the cow will not refuse to give any milk. So you see I have a fine cow that only gives milk out of two teats. I have inserted a knife and up the teat without any good results.—A. FERGUSON, Augusta, Ark.

Ans.—You are unfortunate in having such a cow, as from your description we judge nothing can be done to benefit her. The two other quarters of the bag will increase their capacity and will give more milk in proportion than if all four were active.

What will destroy screw worms or maggots in heads of cattle that have been dehorned a few weeks? I have a mare that raised me a fine mule colt last year. It was taken from her last November, but she has never dried up yet. I could draw nearly a pint of milk from her now if I desired. I have bathed her bag with spirits of camphor but it did no good and seemed to distress her and I ceased to use it after two or three days. She eats well, but does not seem to be in good health, or condition, and is troubled some with lice. What more can I do for her?—B. G. WOODWARD, Toloca, Okla.

Ans.—Chloroform solution of crystalline ointment or spirits of turpentine is good. Cavity should first be washed out with syringe using soap and hot water and a swab of cotton, lint or sponge. Milk only enough out of her bag to keep it soft and give her dry feed principally. It will dry up in time and will do no harm unless you allow the bag to get too full. You might try wetting it with an aqueous solution of belladonna occasionally.

Please tell me what ails my mare and what to do for her. About two months ago she commenced to limp in left hind leg; was slightly swelled in hock joint; has been lame ever since, and is still swelled some. Don't think she was hurt by any accident; have used all kinds of liniments, but to no avail. She has a colt about one month old.—G. D. GORMAN, Leonard, Texas.

Ans.—Try a blister of cantharidine ointment on her hock, and do not let her exercise on it any more than necessary.

I am a subscriber to your valuable paper. I have a mule five years old this spring; got some millet seed in his left eye and a catarrh forms over his eye and runs water but don't stay more than a week or so. Would like to know a remedy for his eye; and also if calomel is too strong for the eye.—HARRY SMITH, Bruceville, Texas.

Ans.—Calomel is not a proper application to use in such cases. Bathe the eye well in hot water three times a day and apply the following: Borate of soda, six grains; morphia sulphate, five grains; atropia sulphate, four grains; cocaine, fifteen grains; distilled water, one ounce. Apply a few drops with a

camel hair brush each time after bathing, and cover with a dark cloth to exclude the light.

Please let me know through Texas Farm and Ranch at what age a horse or mule colt should be altered, some tell me the sooner the better, others not before they are two years old.—M. GORMAN, Austin, Texas.

Ans.—From eight months old to eighteen is about the best age. After that any age answers about equally well.

QUESTIONS AND ANSWERS.

Is alfalfa bad to spread like Johnson grass, and is it easy to get rid of should one want to get rid of it? At what time should it be sown?—D. A. BUTLER, Island, Texas.

Ans.—It is not. When fully grown alfalfa is pretty hard to plow up on account of its immense roots; but out below the crown and that is the end of it. Fall is the best time to plant.

ANSWERS TO QUESTIONS ABOUT GRASSES.

GEO. H. HOGAN.

Enclosed find a sample of a grass found on my farm in Harris county. At this time, April 4th, it has a luxuriant growth. Tell me through Texas Farm and Ranch what it is, and whether or not it is valuable for pasture and oblige.—J. F. Magee, Alief, Texas.

The sample is the Phalaris intermedia of the botanist, commonly called American canary grass, a valuable winter grass, but being only an annual, is easily killed by plowing. Bro. Magee, by investigation, will find that it is a good winter pasture grass, if he will let "old brindle" sample it a while in January or February. By all means give it a trial and save seed in May to plant on more ground. By doing so he will have an ocular test for himself that all the "newspaper farmers" cannot rob him of.

Please have Mr. Hogan name inclosed specimen of grass and state what its value is. I find it growing in many places in this vicinity.—W. J. ARTHUR, Mertens, Texas.

The sample is the Texas blue grass of state wide as well as world wide reputation. I have just received a letter from Australia where all through what they call the rainy season this is becoming one of the most valued grazing plants they have. If Mr. Arthur will watch, in about fifteen or twenty days he can gather seed of this grass. It is worth on the market \$3 per pound, and if he did not sell it he might exchange for something he needs.—G. W. HOGAN.

"I don't know how I am going to make out," said the agricultural statesman who had been retired. "I've got to depend on the old farm for a living now, and I'm blessed if I feel any certainty about making it pay." "But you used to make your constituents very proud of you by showing off what you knew about farming," said his wife encouragingly. "I know it, Maria. But don't forget this: Farming for votes and farming for crops are two mighty different things."—Washington Star.

Bertie's mamma—My dear child, the Lord can do everything.

Bertie—He couldn't drown me, could He?

Bertie's mamma—Of course He could. Bertie—Well, I don't see how He could if I never went bathing or fishing and always stayed on dry land.—Fashions.

Aches

And pains of rheumatism can be cured by removing the cause, lactic acid in the blood. Hood's Sarsaparilla cures rheumatism by neutralizing this acid.

"I had rheumatism so that I could scarcely lift my left foot. I began using Hood's Sarsaparilla, and after I had taken two or three bottles the rheumatism disappeared and has not troubled me since." E. R. WOLCOTT, 66 Bridge St., Springfield, Mass. Get only

Hood's Sarsaparilla

The One True Blood Purifier. \$1; six for \$5. are gentle, mild, effective. All druggists, 25c.

Pain often concentrates all its misery in

Use at once

ST. JACOBS OIL if you want to feel it concentrate its healing in a cure.

PIANOS! ORGANS! FREE! TEST TRIAL FOR 30 DAYS IN YOUR OWN HOME. NO MONEY REQUIRED. **PIANOS-ORGANS FROM \$25.00 UP** in your own home. CASH OR EASY PAYMENTS.

NEW SOUVENIR CATALOGUE of art illustrations in 14 colors. Worth \$1.00. Right now to do is ask for it today please. Remember this is the old established house of CORNISH & CO., the only firm in the world selling exclusively from factory to family direct, at wholesale price. We save you from \$5.00 to \$50.00. Write at once to **CORNISH & CO.,** Estab. 30 years, Washington, N. J.

WE HAVE NO AGENTS

but have sold direct to the consumer for 25 years, at wholesale prices, saving them the dealers' profits. Ship anywhere for examination before sale. Everything warranted. 100 styles of Carriages, 20 styles of Harness, 41 styles of Saddles. Top Buggies low as \$35. Phaetons as low as \$50. Spring Wagons \$40 to \$60. Send for large Catalogue. No. 164—Surrey Harness, Price \$14.00. No. 723—Price, with lamp, shine, apron and fenders, \$20.00. As good as selling for \$25.00. Send for large Catalogue.

ELKHART CARRIAGE & HARNESS MFG. CO., W. B. Pratt, Sec'y, ELKHART, IND.

Jeff Welborn Sends Free

To all applicants his plan of growing second crop potatoes. Also Mr. W. M. Girardeau's instructions for growing watermelons for market and for seed. Mr. G. is the greatest watermelon grower on the globe. I still have a supply of all 12 varieties second crop potatoes for sale. Also Mr. Girardeau's watermelon seed, "Duke Jones," "Sweetheart," "Girardeau's New Favorite" and "Blue Gum" at 8¢ cents per ounce, 1¢ per pound; "Florida Favorite," "Seminoe" and "Rattlesnake," 6¢ cents per ounce, 75¢ cents per pound. Cream of varieties of corn: "Welborn's Conscience" (big cob, ½ to ¾ inch grain; has shelled a quart to the ear), Shannon's "Hoffman" (a large pearly white), "Big Tennessee" (the largest of colored varieties), "Extra Early Tennessee Prolifer" (the largest of 100 to 110 day corn). The cream of cotton varieties: "Jeff Welborn's Pat" (the standard for earliness cluster), "Fruit's Premium" (the king of big bolls—40 bolls per pound), 1½ inch staples from North, Central and South Mississippi, grown by Matthews, Cook and Allen. Price of seed! All varieties potatoes, corn and cotton, prepaid by mail, 15¢ cents per pound; 7 pounds, \$1. By the bushel on application. Send for seed or write to **JEFF WELBORN, Kerr's, Loneoke Co., Ark.**

LUMBER TRUCKS

TO ORDER. HARTWELL IRON WORKS, Houston, Texas.

Texas TO THE WORLD!

The greatest commonwealth in the universe, whose soil teems with the products of the mart and whose laws, constructed for the advancement of man, throw wide open its gates to

People of the United States

and bids them enter for the purpose of investment and settlement.

CAPITAL and LABOR

alike have equal advantages, and thrive under a good and just government, controlling the richest section in the world.

Texas in 1893

produced for home and foreign consumption:

1,848,383 Bales of Cotton,
3,424,441 Bushels of Corn,
24,595,169 Bushels of Oats,
6,553,575 Bushels of Wheat,

and made a correspondingly large record in the production of other staples. The Present Year is the most successful in its history and far exceeds the figures above.

This great state is reached direct from St. Louis, Cairo and Memphis by the

Iron Mountain

Route, 4 DAILY TRAINS 4 —From ST. LOUIS—

and double daily service from CAIRO and MEMPHIS.

For full particulars concerning Texas, and for copy of pamphlet setting forth the wonderful achievements of itself, address:

H. C. TOWNSEND, General Passenger and Ticket Agent, St. Louis, Mo.

Bobbie: Can't you spare me a quarter out of all you have saved this week? Uncle Frank (visiting): How do you

know, Bobbie, that I have saved anything? "Father says you save about 10 a week when you visit us."

Our Clubbing List.

We will send TEXAS FARM AND RANCH and any one of the following publications one year at the very low rate given below. No paper will be sent at less than publisher's full price unless taken in connection with TEXAS FARM AND RANCH. The price of TEXAS FARM AND RANCH is one dollar a year.

Regular With T. price. F.&R.	
American Sheep Breeder and Wool Grower	\$1.00 \$1.75
Atlanta Constitution, weekly	1.00 1.75
American Gardening	1.00 1.75
American Agriculturist	1.00 1.75
Arkansas Gazette, weekly	1.00 1.75
American Winchman	1.00 1.75
Breeders' Gazette, weekly	2.00 2.50
Courier Journal, weekly	1.00 1.75
Colorado Poultry Journal	1.00 1.75
Cosmopolitan Magazine	1.00 1.75
Creamery Gazette, semi-monthly	1.00 1.50
Cultivator and Country Gen'l	2.50 2.50
Chicago Live Stock Journal	1.00 1.75
Detroit Free Press, weekly	1.00 1.75
Dallas Times Herald, weekly	1.00 1.25
Dallas News, semi-weekly	1.00 1.75
Demorest's Magazine	2.00 2.50
Farm Implement News, weekly	2.00 2.50
Farmers' Call	2.00 2.50
Farm Journal	1.00 1.75
Globe-Democrat	1.00 1.75
Green's Fruit Grower	1.00 1.25
Galveston Weekly Tribune	50 1.30
Godey's Magazine	1.00 1.90
Galveston News, semi-weekly	1.00 1.75
Home Queen	1.00 1.25
Hoard's Dairyman	1.00 1.75
Houston Post, semi-weekly	1.00 1.75
Harper's Round Table	2.00 2.50
Jersey Bulletin	2.00 2.25
La Planter and Sugar Manufacturer	3.00 3.50
Ladies World	4.00 4.25
Ladies Home Companion	1.00 1.40
Memphis Commercial Appeal	1.00 1.25
Munsey's Magazine	1.00 1.25
Modern Priscilla	1.00 1.25
N. Y. Thrice-a-Week World	1.00 1.70
New York Ledger, weekly	2.00 2.50
New Orleans Picayune, weekly	1.50 2.25
Ohio Farmer	1.00 1.75
Peterson's Magazine	1.00 1.75
Rural New Yorker	1.00 1.75
St. Louis Globe-Democrat, w'ly	1.00 1.75
Scribner's Magazine	1.00 1.80
Southern Cultivator & Dixie Far.	1.00 1.75
Southern Pioneer	1.00 1.85
The Silver Knight, Washington	1.00 1.35
Texas Farmer	50 1.50
Texas (German) Post	2.50 8.00
Texas Baptist and Herald	2.00 2.50
Texas Christian Advocate	2.00 2.50
Texas Sanwich	1.50 1.75
Wool Markets and Sheep	1.00 1.50
Western Poultry Journal	50 1.40
Youth's Companion	1.75 2.50

At these rates TEXAS FARM AND RANCH must be taken with every order. Any number of club papers may be ordered in conjunction with TEXAS FARM AND RANCH. If you want any other paper not given, write us for our club rate. We can order any paper in the United States for you. Papers can be sent to different addresses. Send money by Post-Office Order or Registered Letter if possible. Stamps taken when order cannot be obtained. Address TEXAS FARM AND RANCH, Dallas, Texas.

Farm and Stock

Butter has been shipped recently from Oregon to Iowa, arriving in good condition and selling for a good price. It is trying on butter to enter the tropics at any season of the year.

A carload of Shropshire lambs ten months old were recently sold in Chicago that weighed an average of 131 pounds. They were from Iowa. It is no trouble to sell that sort of goods.

Nothing, not even cotton, is more salable than good dairy cows. There are ten would-be buyers for every seller. People who have good cows know their value and usually keep them unless a first-class price is offered. If you want to test the truth of this assertion, go out and try to buy a 14-pound cow, or better.

The average farmer wants corn to be worth more than 15 cents per bushel. The average hog raiser don't care if corn is only 10 cents per bushel. To a farmer who combines the raising of hogs with the raising of corn, it is immaterial, for what he loses by the low price as a seller, he gains as a buyer, or user. With a cheap corn a farmer can make cheap pork at a profit. Think of this before you finish planting cotton.

Texas has a few more than 1,000,000 cows reported on farms and 750,000 on the ranges. Agricultural department statistics show that the average animal milk product throughout the country is 315 gallons per cow per year, and the average of Texas is 118 gallons. A large proportion of the farm cows reported are in no sense dairy cows, but are beef breeders, just as range cows are. This, in a measure, accounts for the poor showing Texas makes in the government report.

A writer on hogs advises putting salt peter in the drinking water if you want to make March pigs to weigh 275 in November. Plenty of good, green feed and soaked grain will be found better than salt peter. And pure water better than that with salt peter in it. "Throw medicine to the dogs"—if the dogs are a nuisance, but not to well hogs. Highly fed hogs may have a little charcoal as an absorbent, and ashes and lime as antacids, for the stomach's sake. Let all the rest be good food and pure water.

It is stated now, on what seems to be good authority, that the cattle to be marketed from Texas during the present year will be about 30 per cent less than in 1895. The Texas cattle marketed in '95 were considerably less in number than those of recent former years, thus showing a remarkable falling off in two years. There has, however, been a considerable improvement in the quality of the stock, and a greater proportion of fed cattle will be marketed this year, notwithstanding the scarcity of our best and cheapest feed—cotton seed.

We notice an attempt to pervert the agricultural and stock papers to base uses by using their columns to boost the razor-back hog—especially the Florida, the meanest of all razor-backs—as a good stock to cross improved breeds upon. In the name of common sense, what have breeders been doing these thirty or forty years but trying to get as far away from the razor-back as possible—trying to breed every trace of his worthless blood out of the hog species? Would gentlemen have us go back half way to the place and time where the present great improvement started, by adulterating the better blood of to-day with the scrub blood of the dark ages of hog breeding? The legion of devils that went out of the lunatic and took refuge in a herd of razor-back hogs were hard to breed out; and now that the great end is almost accomplished, we are advised to recall these devils and cross our good hogs upon them. This is one of the things that it will not do to do.

A BEET ROOT SUGAR FACTORY IN THE PECOS VALLEY.

F. E. ROESLER.

The official announcement has just been made that the final arrangements have been concluded for the immediate erection of a beet root sugar factory at Eddy, New Mexico. The capacity of this factory is sufficient to work up 225 tons of beet roots per day, and to turn out every twenty-four hours from 35 to 40 tons of fine granulated sugar. It will require the product of \$800 to 10-

000 acres of sugar beets during the sugar campaign, or sugar season, which in the Pecos valley will probably cover from 120 to 175 days in the year.

The erection of this factory was the consequence of several years of consistent, careful and systematic experimental work, to determine the adaptability of the country to this product. A chemist made analyses of the crops every few weeks for several years, and the various analyses yielded satisfactory results beyond expectations.

There are now six beet root sugar factories in the United States, and these produced in 1895 21,980 tons of sugar. Three of them are in California. The average production of sugar beets in that state, according to report of United States Commissioner of Revenue, (1894) was 12 tons to the acre. The average per centage of saccharine matter is good, but is frequently reduced by the winter rains, which start the beets in the ground to growing again, after having matured.

Two factories are in Grand Island, and Norfolk, Nebraska. These turned out 4420 tons of sugar in 1895. The average yield of beets in that section is only eight tons to the acre, and even this is frequently cut down by drought or early frosts. Yet both are profitable enterprises.

The sixth factory is located at Lehi, Utah, and produced 3600 tons of sugar in 1895. The yield of beets at Lehi averages about ten tons to the acre, and the crop is esteemed very valuable by the farmers. The Lehi factory is regarded as a pronounced success, and the owners propose to double its capacity at the earliest possible moment.

The total consumption of sugar in the United States in 1895 was 1,949,744 tons, of which 362,000 tons, or about 18 per cent only, were produced at home. Of this home product, 324,500 tons were Louisiana cane sugar, and 39,000 tons were beet sugar. To supply the home demand with American sugar it would require 400 factories with a capacity of 500 tons of beet sugar per day, and each in operation at least 80 days in the year. There can, therefore, be no question as to market for the new factory product.

The various analyses of Pecos valley sugar beets made since 1891, give the following results: Crop of 1891.—Report of Prof. H. W. Wiley, U. S. Department of Agriculture: "Average weight of beets, 27 ounces; average per cent of sugar, 14.45 per cent, the richest beet giving 21.85 per cent." Of the crop of 1892 Prof. Wiley says: "Eleven samples from New Mexico showed a beet rather above the average size, but with a phenomenally large content of sugar." Experiments were continued by Prof. E. M. Keats, agricultural chemist at Eddy, N. M., and Mr. Alfred Musey, expert in sugar refining, and for ten years manager of beet root sugar factories in northern France. Mr. Musey in April, 1895, reports his general conclusions as follows:

First—"That the farmers of the valley are ready to grow beets in such quantities as will insure, even for the first year, a supply of 40,000 to 50,000 tons."

Second—"That the yield per acre is without doubt larger here than in any other part of the United States; that raising of rich sugar beets here will be more profitable to the farmers than elsewhere, because the expense of raising them will be less and the crop greater."

Third—"That the percentage of sugar in the beet, though varying in the analyses made, is nevertheless sufficient to make the beet root sugar industry in the valley a success."

Continuing, he said: "I think 20 tons per acre is the minimum a farmer should count upon, and this is enough to warrant a return of \$80 per acre, even though the proportion of sugar does not exceed 14 per cent."

Analyses made about November 25th, 1895, by Prof. E. M. Skeats, at which time many of the beets seem to have attained their maturity, showed the general average throughout the valley for all well cultivated fields to be over 18 per cent of sugar, and from a single field twenty-five beets were dug from ten feet in length of a row, which gave an average for the 25 beets of 20.87 per cent of sugar, 87 per cent purity. The richest beet of the 25 contained 23.75 per cent sugar. The field was estimated to yield at the rate of 31 tons to the acre. Figuring at \$4 per ton, this crop would yield a money revenue of \$124 per acre.

These and numerous other analyses have proven so satisfactory that the erection of the factory was finally determined on. The work of construction will now be rushed through to comple-

tion, so as to have the whole plant in working order in time for the fall crop of 1896.

To the farmer of the Pecos valley the factory is of vital importance—a market is at once provided for a most valuable crop. The income per acre is increased from an average of say \$20 to \$25 per acre for common field crops, to \$80 to \$120 per acre for beets. A man with ten acres in beets and a factory within reach can make a comfortable living; with 20 acres he can make money, but he will have all the work he can attend to. In Nebraska, California and Utah, lands within the vicinity of these factories have appreciated several hundred per cent within a year, and in the Pecos valley a more rapid rise may be expected, because the most perfect conditions for the beet root industry exists here. At the present time several hundred farmers are needed there to grow sugar beets.

Dallas, Texas.

TUBERCULOSIS AMONG DAIRY HERDS.

COLLIN.

Fortunately for the Southern breeders and dairymen, this disease is not as prevalent in the Southern States as it is in the North and East.

Some contend that at most, there are very few cases of tuberculosis in the Southern and Western states, especially the Southern tier of states. That tuberculosis does exist in the South is certain, but a sufficient amount of work has not been done along this line to determine to what extent the disease does prevail; but it is well known that it is much less prevalent than in some other sections of the United States.

The rapid development of sanitary science within the last decade has clearly demonstrated the fact that the question of bovine tuberculosis is now one of the most important, calling for the attention of health officers and sanitarians. The question is of greatest importance since we know that the disease may be communicated from animal to man, rather by infection through the air passages, or by consuming the flesh or milk of diseased animals.

To the human race tuberculosis is the cause of more deaths than diphtheria, small pox, cholera and typhoid fever combined. There are about 5500 deaths from tuberculosis in the city of New York every year, and the reports of the different boards of health of the various states show that the number of deaths from this disease is alarming.

Within the last few years a great many experiments have been conducted in connection with tuberculosis, and the result of different investigators are substantially the same on a number of important points.

The following are some of the most important: Tuberculosis in cattle is the same as consumption in man.

The disease may be transmitted from the lower animals to man, or from man to the lower animals.

Flesh and milk from tuberculous animals may convey the disease among our domesticated animals. Cattle are preeminently the bearers of this disease.

Since it was demonstrated by Dr. Koch in 1882 that tuberculosis was due to a germ, bacillus of Koch, it is unnecessary to argue that certain artificial conditions which we may impose will cause tuberculosis. However, there are certain conditions which will not only predispose the animal to tuberculosis, but other forms of disease as well.

Of all conditions imposed upon dairy herds, I believe that the confinement of cattle in close, dark and poorly ventilated buildings will show a bad effect upon their health sooner than any other condition which we may impose, presupposing that food is sufficient.

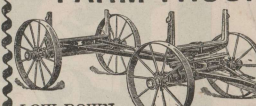
The climate of the South does not necessitate the confinement of dairy cows in barns for as great a length of time as it does in the North, where they must be in the barn continually for from two to four months, even longer.

When housed for even a much shorter period the continued breathing over and over again the same air, poisoned with the gases of the expired air and stable odors, cannot be anything but detrimental.

Such conditions, however, will not cause tuberculosis, but if there are any diseased cows in the herd, such conditions as I have mentioned are the most favorable for the spread of the disease.

In general, it may be stated that all conditions which have a tendency to weaken the physical condition of the animal, such as poor feeding, in-breeding, etc., may be considered as pre-

ALL STEEL FARM TRUCK



LOW DOWN. Durable.

SAVES HALF A HORSE.

25 per cent, stronger than wood. 25 per cent, less draft than the common wagon, and many other superior points—all are described in our descriptive circulars. Yours are very anxious to have you know all about it. Write today; mention this paper.

BETTENDORF AXLE CO.

HESTER GROVE BERSHIRE. Registered stock for sale at all times. Write us. **BAIT & HESTER,** Box 123, Corsicana, Tex.

REGISTERED English Berkshire swine. Milk Durham cattle, S. C. Brown Leghorn chickens, M. B. turkeys. Pigs in pairs not related. Write **W. J. COOPER,** Holland, Texas.

J. E. Williamson, Marshall, Texas. Breeder of registered Berkshire Swine. Pigs for sale at \$16 a pair.

ENGLISH BERSHIRE HOGS. For sale \$15 a pair. **PARKS** from the best families, including Highclere, Lord Bacon, Longfellow, etc. My hogs are partly imported from England. **GEO. T. JESTER,** Corsicana, Texas.

A. J. C. C. Jersey Cattle. Merino sheep and Berkshire pigs. All stock registered. **ENNIS**, or Morgan, Texas.

I HAVE FOR SALE FINE REGISTERED BERSHIRE AND POLAND CHINA PIGS—NOT A-KIN at \$15 per pair 2 and 3 months old. Sent by Express, and guarantee safe delivery. I have the finest registered hogs in Texas. **F. D. NIX,** Oak Cliff, Tex.

Fairview Stock Farm.

Of thoroughbred Holstein-Friesian cattle, Poland-China swine, Barred Plymouth Rock chickens. **B. F. WEDDEL,** Heldenheimer, Tex.

J. I. Richardson, Ray, Ellis County, Texas. **POLAND-CHINA SWINE.** PIGS FOR SALE. Write for prices.

ESSEX PIGS FOR SALE. Registered stock, bred by highest prize winning breeders, and of select sows. They excel in beauty, health, docility and fattening qualities, weighing from 300 to 350 pounds at 12 months old. Essexes are especially adapted to the South. Try them and be convinced. **W. R. CAVITT,** Bryan, Texas.

My Berkshire Herd contains 115 direct offspring of nearly all the prize-winning blood of the Fair. My Poland-Chinas are of best strains. Essex hogs for sale. **W. L. FOSTER,** Shreveport, La.

Harwood & LeBaron Bros., FENTRESS, TEXAS.

Berkshire Swine and Jersey Cattle or best breeding. Write us for pedigree and prices.

WILLOW STOCK FARM.

ALLEN T. MURCHISON, Prop'r. Breeder of BERSHIRE HOGS and FINE HORSES. Farmersville, Collin County, Texas.

W. H. PIERCE, Denton, Texas, breeder of large English Berkshires. Two boars, each winning 1st in class, 1st and 2d in sweepstakes, and stood head of 4 herds, winning 3 1st and 2d. Another is full brother to sire of sweepstakes now at World's Fair. Pigs from these boars and sows of equal blood for sale.

Ball County Herd of Poland-China swine. Pigs for sale at all seasons. Stock the best. Come and see me and be convinced. **A. W. PARIOTT,** Holland, Texas.

Magnolia Herd Record Poland Chinas,

headed by the great Guy Wilkes 2d, Jr., assisted by four choice sows, representing all the best families of the breed. Our prices are right. **STELL & McFADDEN,** Paris, Texas. When writing mention this paper.

FANCY BRED POLAND CHINAS.

Three boars in herd: Claude, sweepstakes winner at St. Louis, 1895; Texas Claude, sire Claude, the great World's Fair sweepstakes winner. Eric Short Stop, head of young sweepstakes herd at St. Louis Fair, 1895. I purchased the old and young winning herds at the St. Louis Fair, 1895. All the noted families represented. Large size and well finished. Eggs from Toulouse geese and White Holland turkeys, \$2 per sitting of 9. Write your wants. **C. W. THOMAS,** Pottsville, Texas.

VALLEY FARM, TERRELL, TEXAS.

Elite pigs ready for market. Service boars, Baron Duke, World's Fair winner and Prince Imperial, two of the best boars in the United States. Pigs out of some of the best sows that can be found anywhere. Please order. **HARRIS & HARDIN.**

roundings, their articles will be of far more value to the general reader. We write for the young or inexperienced, or else we write in vain. But friend Stringfellow's articles has set us all to thinking, and the oldest will do well to read and ponder them. Farmers have long known that if you plow today a few rows or less in a corn field, and at night a frost comes on, the corn well plowed will every stalk be killed, while the unplowed will escape unhurt and often does especially if deeply planted.

But how about an orchard? My soil is light black prairie partly covered with liveoak and mesquite. My orchard proper is young. This is its third year, and hence I am cultivating three rows of potatoes or corn in the middles. This leaves the trees on the middle of an eight foot bed that has not been plowed. The past week we had two frosts, thermometer barely to 32 degrees. I have thirty varieties of peaches in my orchard. Excepting some Alexanders next to the cow lot the fruit is entirely destroyed; apricots also.

In one of my chicken yards which has never been cultivated, I have five peach trees and plum trees all in full bloom. I never saw heavier crops of fruit, and but little damage by frost. If we have no more frost I will have to unload the trees to fully one-half. Moreover these same trees last year bore heavy crops despite the cold weather that destroyed almost the entire fruit crop of all this section in my yard. I have five peach trees, one prunus simoni, one quince, three pear trees and several plums not at all injured by the frost. These all bore heavily last year except the pear and quince which are too young yet to bear, and are again full. Two neighbors had plowed their orchards and lost all their fruit; one neighbor had not plowed, and his fruit is but little injured.

Is not this an object lesson well worthy of our serious study. From it I would deduce the following rule for cultivation: Never put a plow into the orchard until all danger of frost is over.

Now don't understand me to say that frost nor freeze can destroy the fruit on non-cultivated trees, but only that an orchard freshly plowed is far more susceptible to freeze and frost than unplowed soil. My orchard was plowed at least three weeks before the frost, for the Irish potatoes were just beginning to come up.

Live, study, learn.
Belton, Texas.

ONE YEAR'S EXPERIENCE WITH PEAR BLIGHT.

A. M. HILDEBRANDT.

As a student of horticulture I have been following the articles by Mr. Stringfellow with great interest. But in his last on the subject of blight I was rather surprised that he should assume a theory after only one year's experience, about a subject to which the scientific mind of the United States has given much thought, time and labor, and are still far from solving.

Mr. Stringfellow takes the ground that blight originates in the sap, due to overbearing, too early pruning, lack of moisture, and to unfavorable temperature. That such conditions are vital factors in facilitating disease, no one will deny. But it does no more prove that such conditions are the direct cause of blight, than physical disability is the direct cause of small pox.

If the disease originates in the sap it would necessarily affect the roots and trunks first, or at least at the same time that it does the upper parts. But how is it? Unless an affected limb is allowed to remain near the lower part of the trunk, no matter how bad the upper part of the tree is affected if the tree is cut down within several inches of the ground, no sign of the disease is visible, but healthy shoots will often come up and grow to be vigorous trees?

If the disease originates in the sap, then, according to the law of hydrostatics, both sides of the limb or trunk would be affected at the same time. But in our experience with blight last summer we invariably found that the disease first appeared on one side of the limb and trunk.

As regards early pruning, overbearing and lack of moisture, I will say that if conclusions can be drawn from one year's experience, these influences have nothing to do in causing blight.

During the summer of '95 one of our experimental pear orchards, consisting of 94 eight-year-old Le Conte and about 30 Japanese pear trees of the same age, was struck by blight. The soil on which

this orchard is located is a sandy clay. No pruning was done on them the winter previous. The soil was plowed once during February. The trees never bore any fruit until the summer of '95. The mean temperatures for the months of January, February, March, April, May and June, as reported by the meteorologist of the station, were 51.50, 43.00, 55.00, 75.80, 72.20 and 72.00 respectively. The rain fall for the corresponding periods were 2.37, 1.13, 1.91, 1.71, 12.44 and 5.26 respectively. The trees had begun to blossom the latter part of March. No sign of the disease was visible until the early part of May. The disease then manifested itself by the leaves as well as the tops of young shoots, turning black and traveling in a downward direction. The Japanese trees were entirely free from the disease.

The disease was not fought as it should have been, owing to the fact that the station has only one man for the horticultural department.

On the 13th of June, when I was put to look after the blight, I found that the disease had made great headway. Some of the trees were totally destroyed and the same were cut down; others had their limbs badly affected, and these were cut off. Believing at the time that the disease extended down the wood only as far as indicated by the blackened parts, I cut off only the blackened parts. This had no effect and the disease continued downward. I then concluded that the disease extended farther down than indicated by the blackened surface, and began to cut about two feet below the same. All the dead wood, together with the blighted leaves that fell on the ground, were burned as soon as possible. The effect of the cutting had now begun to manifest itself, and about the middle of July we had the disease under control. The number of trees lost was 53, and saved 41, which, with the exception of four, are in an excellent condition.

If we could draw definite conclusions from our one year's experience, as Mr. Stringfellow does from his, they would be:

1. Early pruning has no influence on blight, as our trees were not pruned at all.
2. Overbearing has no influence on blight, as our trees never bore fruit before.
3. Lack of moisture has no influence on blight, as shown by the amount of rainfall at the station during the growing period.
4. Temperature has no influence on blight, as the mean temperature shown above is certainly favorable to the growth of trees.
5. Not all kinds of trees are susceptible to the disease, as demonstrated by our Japanese pear trees, although standing close to the Le Conte, were not affected at all.
6. Cutting off the dead parts of the wood sufficiently below the blackened area, and the same burned as soon as possible, that good results will be obtained.

I am, however, not drawing definite conclusions. This can only be done after years of experimenting. Still the foregoing remarks impress the mind with the fact that, unless Mr. Stringfellow can verify his theory by experiments, the view he entertains regarding the internal theory of blight is liable to error.

The experience that I had during the time mentioned with another pear orchard leads me still further to doubt the soundness of the internal theory of blight.

Separated from the orchard previously mentioned by a distance of about 400 yards we have a three-year-old pear orchard, consisting of 76 Duchesse, 67 Howells, 53 Seckel, 55 Bartlett, 63 Keiffer and 33 Le Conte. These trees were trained back during February, '95, and pinched during April. The trees at that time were in an excellent condition. No sign of blight was visible on them until about the middle of May, some time after the Le Conte orchard became diseased. When I began to look after the blight I found that the Duchesse and Keiffers showed no signs of the disease; the Howells and Bartlette were affected, but slightly; the Le Conte somewhat more and the Seckel to a great extent. The affected shoots were cut off about nine or ten inches below the blackened area. This checked the blight on these particular shoots, but others became blighted. Being very young trees, it was plain that severe cutting would cause them to be permanently deformed. By this time we had lost: Duchesse, none; Howells, 5 per cent; Seckel, 89 per cent; Bartlett, 15 per cent; Keiffer, 15 per cent; Le Conte, 27 per cent. Having observ-

ed that the disease first attacked the margin of the leaves (some times the surface of the leaves in spots) and then traveled downward through the petiole to the wood, it occurred to me that perhaps by taking off the leaves as soon as they showed signs of the disease would be good. This was about the middle of July and the results far exceeded my expectations, as from that time the shears were seldom used on these trees, and not more than two hours a week was necessary in looking after them. Here is evidence that forces itself upon the mind that the disease is caused by external agencies; that it is contagious and not all trees are susceptible to the disease. The conclusions that can be drawn from the facts in regard to the Le Conte orchard can also be adduced in this case, as the conditions were substantially the same.

Mr. Stringfellow puts great stress upon the question: "But on the external hypothesis, where in the none-blighting seasons do the bacteria go? Are they like ducks and geese, migratory?" As a matter of fact no one will dispute that all contagious diseases are due to bacteria. I would like to ask where, in the seasons free from these diseases, do the bacteria go? Are they like ducks and geese, migratory? The question requires no answer.

Experiments carried on by scientific investigators also lead me to doubt the "internal theory of blight," as it has been proven by inoculation that the disease is due to bacteria.

Mr. Stringfellow further produces argument against the theory of bacteria in citing the fact that he sprayed six trees most thoroughly without any effect. To my knowledge there is no literature in which it is positively asserted that spraying is a remedy for blight. To my mind this can be explained. We know it to be a fact that not all bacteria have the same power of endurance. The spores of many kinds of bacteria will withstand boiling for an hour or even more, and some at even higher temperature, while the spores of *Bacterium anthracis* are stationary to remain alive in absolute alcohol. In the face of this it is not possible that the bacteria which produce blight are of such a tenacious character as to withstand the application of fungicide?

Waite has proven in his excellent work on "Pollination of Pear Flowers" that most varieties of trees are fertilized by bees and insects. (Bulletin No. 5 the Pollination of Pear Flowers, U. S. Department of Agriculture). Also that blight is caused by a very minute microbe, and that the disease is carried from flower to flower by the insects visiting them for the nectar. It is a known fact that the buds do not open at the same time, but at intervals some of forty-eight hours. Is it not possible that insects, visiting flowers that come out after the same had been sprayed, deposit on them pollen from affected flowers and thus become blighted?

I am, however, like to say that in writing this article it has been far from my intention to enter into a controversy upon the subject. Far less has it been my intention to disprove one iota of what Mr. Stringfellow has said. On the contrary, if Mr. Stringfellow discovered a remedy for blight, a disease which costs the United States millions of dollars, posterity will be too willing to accord to him all the honor for it. What I contend is, that to draw definite and final conclusions prematurely, is contrary to science and subject to criticism.

College Station, Texas.

FRUIT PROSPECTS IN SOUTHWEST TEXAS.

W. R. HAYES.

The writer has an experimental orchard, vineyard and garden of two acres, watered from a windmill when necessary, and will give a few notes as to present fruit prospects:

About fifty seedling peach trees are well filled with fruit a month old. Alexander and early St. John just in bloom.

Japanese plums just blooming. LeConte and Keiffer pears three years old growing remarkably fast.

Figs trees have fruit weighing half and ounce.

Almonds fully as large. Oonshu oranges direct from Japan, three years old, were killed down a year ago, but the new growth is three feet high, and some now have blossoms.

Fifty pear trees planted in January, on Stringfellow method are all growing luxuriantly.

Grape prospects excellent, and if we



WHAT WE SAY WE DO
WE DO DO

Unjust Taxation

has always merited condemnation.

N UNJUST tax is contrary to every instinct of reason and equity. Men and nations rebel against it. The man who buys "cheap" harvesting machinery is doomed to pay tribute to the manufacturer for replacing parts that break—parts that wear out too soon. This is unjust taxation. McCormick Harvesting Machines are built upon honor. They insure the purchaser against extortion for repairs; parts that should not break do not break, because scientific figuring enters into their construction; parts that wear do not show wear, and need not be replaced until after long, hard service. The first cost of a McCormick is a little more than the first cost of other machines, but with the McCormick you get more than you pay for, while with the others you pay for more than you get.

The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower and the McCormick Corn Harrow, are unequalled for capacity, light-draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago.

Agents Everywhere.

I have for sale 400 BUSHELS GERMAN MILLER SEED, free from Johnson grass, sixty bushels sorghum cane seed. Will sell in quantities to suit. Write for prices.
N. B. HARRELL, Celeste, Texas.

FOR SALE CHEAP.

275 bu. Kafr Corn, 200 bu. Early Amber Cane seed, FREE FROM JOHNSON GRASS. Write for prices to P. A. McDONALD, Jr., Duncanville, Tex., or G. A. KNIGHT, 148 Commerce St., Dallas, Tex.

AUSTIN NURSERY.

35 years experience on this black land. Everything tested. No drones in the orchards we select. Large stock. Prices reduced. Catalogue free. Fortunes in our Texas varieties. We may express.
RAMSEY & SON, Austin, Texas.

McKINNEY NURSERY.

Black Land Fruit Trees.

NO INSECTS. ... NO DISEASE.

Latest and best home and commercial varieties. Immense Stock, Marvelous Growth, Perfection in Form. Prices down on honest basis. Send for list. Special rates on large orders. Try our trees and be well pleased.

E. W. Kirkpatrick,

McKINNEY, TEXAS.

SPRAY PUMPS

EXPRESS PAID.
Satisfaction Guaranteed or Money Refunded. Endorsed by leading agronomists. 10,000 in use. We are U. S. Headquarters for Spray Pumps, and insecticides. Catalogue, Spray Calculator, and full Treatise on Spraying, FREE.

\$17 SPRAYING OUTFIT \$5.50

EXPRESS PAID, FOR P. C. LEWIS MFG. CO., Inc., at Catekill, N.Y.

"Popper," the little boy asked, "what kind of a horse is that they call a plug?" "A balky one, my son. They call him that because he is a stopper."—Philadelphia Record.

FRENCH BUHR MILLS

35 sizes and styles. Every mill warranted.

For All Kinds of Grinding.

A boy can operate and keep in order, and sample meal FREE.

All kinds mill machinery. Flour mills built, roller or burr system. Reduced Prices for '96.

NORDYKE & MARMON CO., Indianapolis, Ind.

DON'T BUY

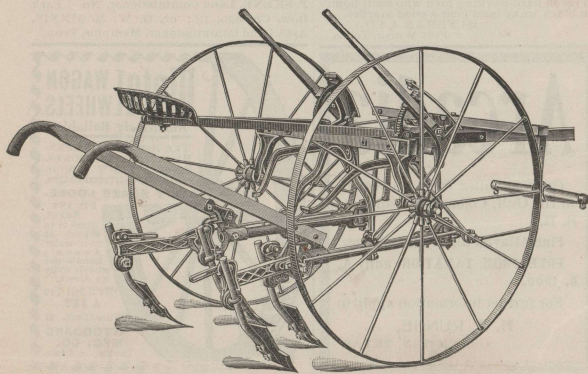
A Carriage, Buggy, Phaeton or vehicle of any description without first getting our illustrated catalogue and price list (sent free). We sell only work manufactured in our factory. **GUARANTEED THOROUGHLY RELIABLE** at prices within reach of all. Capacity, 10,000 jobs per year. **THE COLUMBUS CARRIAGE MFG. CO. Box 377 P Columbus, O.**

**To the Ginners of Texas.**

For the past two seasons frequent reports have reached us through reliable channels that salesmen of a certain manufacturing concern represent to our customers that the Eagle Cotton Elevator can not carry cotton to more than a battery of three gins, and having been greatly damaged by such report, to the extent of losing large business, which would no doubt have come our way but for these misrepresentations, we find it absolutely necessary for the protection of our best interest, and to further prevent loss of business through such questionable methods to expose the same, and herewith most emphatically assert that such statements are not true, and we have every reason to believe that the parties knew the statements were false when they made them, and resorted to these misrepresentations in order to secure business they were unable to get by fair and legitimate means.

We desire to add, that if this and other equally questionable methods and misrepresentations as to us and our goods are continued by some of our competitors, we shall be constrained to take notice of them in other ways.

Yours truly, **KEATING IMPLEMENT & MACHINE CO.**

THE Standard Cultivator.

Simple and practical in construction, perfect in every detail, gives satisfaction where others fail. Equipped with the latest improvements which makes it a success.

For 17 Years the Leader in Texas!

EASILY HANDLED, SIMPLE and DURABLE.

If you have not used the Standard, try it this season and you will be convinced that it is absolutely the **BEST Cultivator SOLD in Texas.**

Write for prices.

EMERSON MANUFACTURING CO.,
DALLAS, TEXAS.

**DONT GET LEFT
THE KATY FLYER
A NEW FAST TRAIN**


**FIRST CLASS SERVICE
TO
ST. LOUIS
AND
CHICAGO
WITHOUT CHANGE.**

**TO THE Cotton Ginners of the South**

THOUGH we have been in the Gin Machinery business but eleven years, yet we do not think it egotistic to say that no line of Cotton Ginning and Handling Machinery is more generally and favorably known. Merit alone could establish the trade we now enjoy. From a small beginning, our trade has reached such a volume that in 1893, 1894 and 1895 it exceeded that of any company in the United States in our line.

Our factories are unsurpassed. Having two factories, one at Dallas, Texas, and one at Birmingham, Alabama, puts us in close touch with the trade and enables us to secure the lowest possible freight rates, and, in case of accidents or break-downs, to furnish repairs to any part of the South in 24 hours. Our two factories cover a floor space of 97,700 square feet.

Munger's ideas revolutionized the Ginning business. Our competitors admit it, and follow our plans as close as the patent laws will allow, and take great pride in saying that theirs is as "Good as Munger's." We make a specialty of complete Ginning Plants, and we can truthfully say that we have put in more complete plants in the South in the past eight years than all others combined. Our machinery has been improved in detail from time to time, and is now, as in the past, the **LEADER and STANDARD.**

WE MANUFACTURE:

Plain Gins for Upland Cotton,
Huller Gins for Bottom Cotton, Feeders, Condensers,
Single Lint Flue from any number of Gins to Condenser,
Suction Elevators and Cleaners,
Seed Blowing Elevators,
Double Box Self-packing Presses,
with Screw, Hydraulic or Steam Power.

We furnish full detailed plans for erection of buildings and placing machinery without charge. Write for Catalogue and any special information wanted.

NORTHINGTON-MUNGER-PRATT CO.,

BIRMINGHAM, ALA.

For Territory East of Mississippi River.

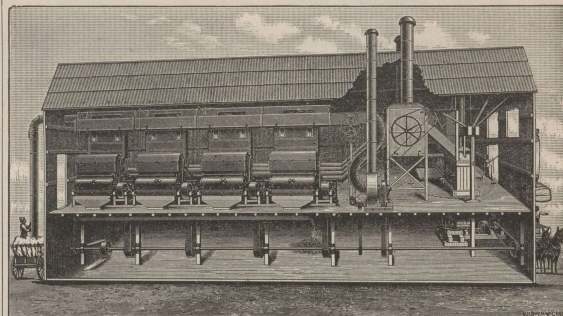
MUNGER IMPROVED COTTON MCH. MFG. CO.,

DALLAS, TEXAS.

For Territory West of Mississippi River.

EAGLE COTTON GINNING SYSTEM.

WAGON TO BALE.



Simple, Reliable, Safe. Light Draft, Less Labor, Best Results.
NO SPIKE BELT DISTRIBUTER.

Cotton carried into Gin Feeders by Suction, more Regular than any Mechanical Device.

In support of our claims we submit the following for your consideration:

ON SUPERIORITY:

Highest award, **GOLD MEDAL**, Texas State Fair and Dallas Exposition, 1895.

ON SIMPLICITY:

A young lady, sixteen years old, had charge of a three sixty-saw Eagle battery gins and elevator three days, operating it without difficulty and with best results.

ON SAFETY:

To this date not one complete Eagle system is reported lost by fire.

ON BEST RESULTS:

On the 16th of September, 1895, Richard Lamb, Mineral Wells, loaded three wagons with cotton of equal weight, gathered off the same field, and carried them to three different gins, one our Eagle system, the other two well known leading systems. The Eagle system bale brought him \$2.40 more money. The Eagle system ginned the balance of Mr. Lamb's cotton.

Mr. Richard Lamb's report is one of a large number now in our office in support of our claim on the superiority of our sample.

We are prepared to furnish complete plants with modern improved Boilers, Corliss, Automatic or Throttling Engines, Steam Pumps, all kinds of Farm Machinery, such as Threshers, Steam or Horse Powers, Hay Presses, Power Shuck Shellers.

For catalogue and prices address

KEATING IMPLEMENT & MACHINE COMPANY,
DALLAS, - - - TEXAS.

Texas Farm and Ranch Published in the South for the progressive Southern farmer. Your neighbor needs it.