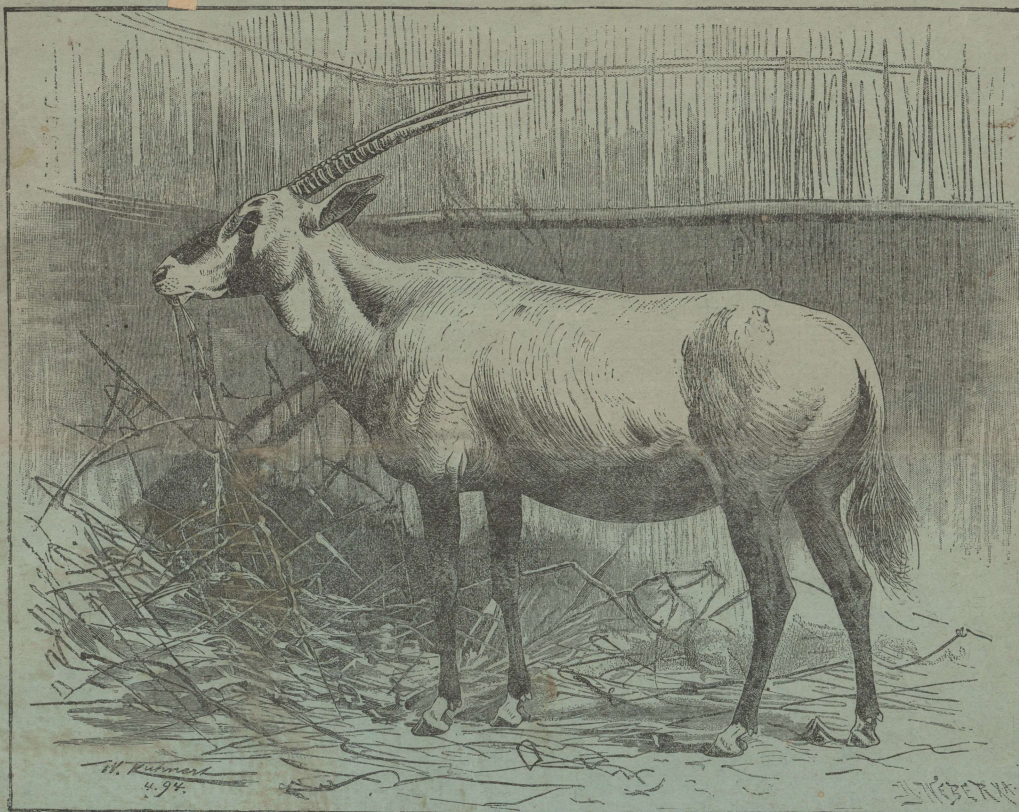


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THE BEATRICE ANTELOPE IN THE ZOOLOGICAL GARDEN IN BERLIN.
BY COURTESY OF THE SCIENTIFIC AMERICAN.

THE BEATRICE ANTELOPE IN THE ZOOLOGICAL GARDEN IN BERLIN.

Paul Matschie, in the Illustrirte Zeitung.

Arabia is one of those lands in which the animal world has been only very insufficiently investigated. Climatic difficulties, the reserved nature of the natives, and, perhaps, the limited prospect of making discoveries that would astonish the world have restrained zoologists from penetrating into this interesting territory, doubly interesting because of the fact that within the limits of Arabia the Ethiopian and Asiatic faunas meet. In the district South of Roba el Khali, the ill-famed sandy desert west of Oman, which is bounded by the Gulf of Aden, only a few large mammals are found, such as the baboon, the gazelle, etc. The accounts of the natives lead us to suppose that there are lions and panthers in this part of the country, but the astonishment of the scientific world was great when, twenty years ago, it was learned that eastern Arabia was the home of a great antelope.

The Beatrice antelope is one of the most expensive rarities in a zoological collection. Only a few specimens have

been brought to Europe alive; but a short time ago it was successfully landed, and now is an ornament to the Berlin Zoological Garden. The Beatrice antelope, or so-called spießbok is characterized by its long horns, which are straight, or only slightly bent, and are annulated only at the roots. They extend backward, almost parallel, or slightly divergent. Six representatives from this group are now known, the gmsbok, of Southwestern Africa, the pinselohr, or brush-eared antelope, of German East Africa, the beisa, of the Somali coast, the Beatrice antelope of Southern Arabia, the sable antelope of the Eastern Sudan, and the aschamel antelope of Southwestern Africa. The Arabian spießbok, as our antelope might be called, is a beautiful animal of slender build, with delicately modeled head and strong legs. The body is white, but the bush on the tail, the breast, the legs, the ridge of the nose, and the cheeks are dark brown.

I cannot say anything in regard to the habits of these antelopes, for no European has seen them when free. It is only known that they live south of Muscat. The Beatrice antelope lives in

small herds on the stony ridges that bound the desert. The accompanying illustration is from a drawing made by the animal painter, Wilhelm Kunnert, from the specimen in the Berlin Zoological Garden.

DANIEL WEBSTER ON THE GREAT WEST.

Scientific American.

When we think of the teeming population which now fills many portions of our country west of the Rocky Mountains, and remember how famous all over the world is their singular beauty and their incomparable value to the tourist, the health seeker, the agriculturist and horticulturist, as well as the miner, it is interesting to read what so intelligent a statesman as Daniel Webster thought of them just fifty years ago, and to know that his views were shared by many other prominent men of the time. In a speech delivered in the United States Senate in 1844, with regard to the proposal that a mail service should be established between Missouri and the Pacific coast, Webster said: "What do we want with this

vast worthless area, this region of savages and wild beasts, of deserts, of shifting sands and whirlwinds, of dust, of cactus and prairie dogs? To what use could we ever hope to put these great deserts or those endless mountain ranges, impenetrable, and covered to their base with eternal snow? What can we ever hope to do with the Western coast, a coast of three thousand miles, rock-bound, cheerless and uninviting, with not a harbor on it? What use have we for such a country? Mr. President, I will never vote one cent from the public treasury to place the Pacific coast one inch nearer Boston than it is to-day."

Much is being written now about the use of sugar and molasses as a feed for stock. Experiments have been made in France and Germany which tend to show that no other form of hydro-carbon is so cheap as measured by results. If the cost of production continues to favor this new departure, we may expect soon to see sugar a common component of the daily ration for fattening animals in this country; and perhaps the family cow will soon "take sugar in her's."

P 432282
Webster

Orchard and Garden

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

NOTES AND COMMENTS.

E. Crew tells his readers how to manage growing melons. We copy from the Bulletin the following pointers:

The melon comes on the vine before the bloom. Melon first, then the melon blooms at the tip end. The roots to a vine are very numerous and fine, and traverse the whole of the area covered by the vine, and as great in length as the vine; hence the necessity of a thoroughly cultivated surface before the vine covers the ground.

The vine feeds from the atmosphere, drinking, as it were, from the heavy dews. Look out over your patch of an early dewy morning after the ground is covered with vines and see the headers or ends reaching upwards into mid air, drinking, as it were, of the falling dew.

To make the vines put on large melons it will require stirring the surface of the patches, even though you should prune the vines in doing so. Where a melon does not show on the vine, it is not sure that there will not be a big ripe melon there in three weeks.

The dropping of the first melons does not deprive the vine of its use as a crop. It only makes them a little later. We are sure to have a good ripening season; some years a little earlier than others, but not necessarily the best. Rapid growth produces the finest melons, and nothing tends more to this than a thorough surface cultivation just before the vine fruits.

The marketing of fruits has begun in earnest in almost every section of Texas. The crop, while not overwhelmingly large, is sufficiently so to tax our ingenuity to get safely to paying markets. We are prone to over-load a good pulling team when in a rush; so we sometimes over-load a good market, and break prices far below a paying margin. How do we do this? By crowding all sorts of vile stuff into our commission men, simply because the prices rule high. Then follows a dull market. We continue to crowd the stuff, and a glutted market follows as a matter of course. Do you want good prices? Then listen: First, gather with care only your sound, choice fruit, pack in clean, new crates or baskets; make a record for handling only the very best; let the fruit on top, bottom and middle be equally good. Second, remember that an express company will charge just as much to transport a hundred pounds of knotty, wormy, green, trifling little fruit as they will for carrying the same weight of the finest fruit ever put upon any market. Does it pay to take such pains in packing and shipping fruit?

California fruit shippers have won the highest place in the estimation of the commercial world by the remarkable degree of perfection to which they have brought the art of handling and shipping their fruit products. They can't afford to be careless or slovenly when their fruits are to cross the continent to reach a market. So they have studied the problem of preparing fruit for market till they have solved it, and the result is, that only choice fruit in prime condition is permitted to cross the deserts and mountains to reach the populous cities of the E.-st.

Let Texas learn their lesson from them, and keep their poor fruit at home. Feed it to the pigs, or convert it into cider, vinegar, or some other by-product. Don't kill your good markets by deluging them with trash.

We are indebted to President Munson for the following list of Southern bred fruits. Our list is growing, and will soon make a showing of which every Southern fruit grower will be proud. Another point be will allude to in passing, namely: That the fruits of Southern origin include the larger part of all the best grown South. Our wide-awake Southern nurserymen, are on the right track, and are pushing on to success, as they develop new Southern types.

Apples—Red June, Bledsoe, Yellow Horse, Carter's Blue, Doyle, Bradford, Wine Sap, Ben Davis, Rutledge, Texas Red, Nickajack, Arkansas, Kinnaard, Shockley, Shirley, Black Twig, Yates, Pearls—Lexington, LeCombe, Peaches—Miss Lola, Mamie Ross, St. John, Eldred, June Rose, Family Favorite, Gen. Lee, Elberta, Chinese Cling, Utah Free, Utah Cling, Sylphide, Alice Haupt, Columbia, Raisin, Piquet, Bo-

nanza, Loneke, Topaz, Cobbler, Barnes, Bell's October.

Plums—Emerson, Lone Star, Transparent, Clifford, Wild Goose, Wooten, Golden Beauty, Munson.

BERRIES.

Blackberries—Spalding, Dallas, Raspberry—Turner, Strawberries—Michel's Early, Parker Earle.

GRAPES.

Norton, Herbmont, Thomas, Suppennong, Male Muscadine, Dr. Collier, Beacon, America, Big Extra, Carman, Herman Jaeger, W. B. Munson, Gold Coin, Onderdonk, Black Herbmont, Elvican, Newman, Big Hope, Mrs. Munson, Muench, Vinita, Neva, Fern, Laussel, Marguerite.

We would remark that the list of grapes is made up in large part from Prof. Munson's new varieties, which are achieving success because of their adaptability to our Southland.

The meeting of the State Horticultural Society, at Bowie, July 31st, is only about five weeks hence, and every one who expects to exhibit fruits and vegetables, etc., should be looking out their best specimens of fruits. We shall, without question, have a fine exhibit of fruits, as North Texas is strictly in its season. While the fruit crop is not a large one, the quality and size of the fruit is likely to be very good. Let the main purpose of our display be educational. Let us have an object lesson before the eyes of all who would learn of the mystery and beauty of horticulture. Let the exhibits teach what to plant in our orchards and vineyards. Let the methods of handling fruits for home and market be illustrated. Every detail of successful management should receive careful consideration.

The transportation question is one of the coming problems to Texas fruit growers. We are reaching that point in the development of the fruit industry where the shipment of fruits, melons, vegetables, etc., in car lots must be considered; indeed, it is a matter of impossibility for express companies to handle the tremendous output of our orchards and truck farms, and if they could, the prices for transporting would be too great for us to use that line of service, except while prices are high, because of scarcity. When the great volume of shipment begins to pour into our markets, and supply reduces demand, we must cheapen transportation to live, so we turn to the refrigerator cars and train loads or car lots. These must per force go to our great centers for distribution.

This question will be up for discussion at Bowie next July 31st, August 1st and 2d, at the meeting of the State Horticultural Society. It will be discussed both from the standpoint of the producer and the carrier. The general freight agent of the Fort Worth & Denison will talk from the standpoint of the railroad. Members of the Society will discuss it from the fruit growers' vantage. So if any reader of Orchard and Garden is at all interested in this problem, he should be on hand to hear and learn.

FUNGUS DISEASES OF THE POTATO.

G. P. Blinton, of the Illinois station, experimented with preventive of scab and leaf blight of potatoes, and concludes with the following:

RESULTS IN SUMMARY.

"1. Corrosive sublimate treatment of seed as a preventive of scab, with potatoes planted on uninfected land, gave not only from 8 to 34 per cent. more of sound potatoes, but also increased the yield 10 per cent. and rendered less the waste in preparation for household use.

"2. Early and frequent spraying with Bordeaux mixture gave an increase of one-third the total yield.

"3. Paris green added to Bordeaux mixture gave an additional increase equal to one-third those sprayed with Bordeaux mixture only.

"4. In the case of spraying the benefit was due to limiting the attack of the potato bug, and possibly to preventing somewhat leaf blight."

THE COLORADO POTATO BEETLE, Appeared in sufficient force to destroy the crop upon our grounds this spring. The application of Paris green mixed with three times its bulk of flour, dusted through a flour sack, fastened to the end of a board, destroyed them completely.

TIVELY NOTES.

We have given the results of experiments with Irish potatoes just at this time, in order that our readers may be

Induced to observe more critically any experiments they have instituted with this crop.

Gardeners should acquaint themselves with the diseases of the crops which they cultivate. We have seen seed potatoes this spring on the Atlanta market covered with scab, and some shipments of new potatoes have been badly affected, no doubt grown from diseased seed.

DIFFERENT PARTS OF THE POTATO FOR SEED.

Experiments made at ten different experiment stations to compare results of seed from different parts of the potato, show that it makes no difference whether the seed pieces are taken from the stem end, middle, or butt end.

AS TO TIME OF PLANTING.

Experiments indicate early planting as safest as a rule, though under some climatic conditions later planting did better. Very late planting is not recommended anywhere, nor are very late varieties.

DEPTH OF PLANTING.

Results are generally in favor of comparatively shallow planting, though in some states deep planting gave best yield. This, no doubt, depends much upon the character of the land planted.

DISTANCE OF ROWS AND HILLS.

The experiment stations in eight states have investigated this question, and conclude that the rows should be from 2½ to 3 feet apart, and the seed from 1 foot to 2 feet, according to the size of the pieces planted, the single eye closest and the whole potato widest.

CULTIVATION.

Experiments have been made with deep and shallow cultivations; hills and drills, beds and level. Shallow cultivation and drill planting are recommended with a general tendency towards deep and thorough preparation and level culture.

PRESERVING FRUIT IN BORAX

The San Francisco Examiner has the following report of certain experiments now being made with borax as a preservative of fresh fruits. If true, there will be a revolution in methods of handling fresh fruits, and boraxed cars will take the place of iced cars for long hauls. We hope the half said of it may prove true. Meanwhile let us test in a small way this new method.

Frank M. Smith, the borax king, believes that he has solved the problem of preserving fresh fruit so that it can be put on the Eastern markets in a satisfactory condition.

For some time he has been experimenting with borax and finds the ingredients of the salt peculiarly adapted for precluding vegetable decomposition.

The discovery is the result of a suggestion made by Mr. Smith one day while lunching with a friend. The gentlemen were discussing the success that had attended the experiment of boraxing fresh meat, when Mr. Smith was asked why he had never tried preserving fruit in the same way. He said it had never occurred to him, but afterward he gave the subject so much thought that as soon as he returned to his home in East Oakland, he packed several pounds of cherries in a box of powdered borax. This box was placed in the cellar, and alongside of it he put a large glass filled with the same kind of fruit. Then he awaited developments. The next day he visited the cellar and found the cherries in the dish were beginning to turn. In three days they were so decomposed that it was necessary to throw them away. In order to make a good test he determined not to disturb the packed cherries for three weeks. At the termination of that time the box was opened and the fruit was found as fresh and in as good a condition as when first placed there.

CHERRIES KEPT IN PERFECT CONDITION. Mr. Smith was amazed, and he was delighted over the result, and determined to experiment on a larger scale. He had a quantity of cherries packed in a barrel of borax and sent to Chicago by slow freight. Last week he received a telegram saying the fruit had arrived in perfect condition, and was bringing surprisingly high prices.

Since then a number of barrels of cherries have been packed in borax and are now ready for shipment east. As fast as the different varieties of fruit ripen experiments will be made by Mr. Frank C. Havens, at Rose Crest Villa, his place at Vernon Heights, Oakland. The experiments will be on an extensive scale. As the experiments on the different fruits prove successful, barrels

of the fruit will be packed and sent to the East and Europe. Whenever an experiment is pronounced successful, it will be published for the benefit of growers and commission men who may wish to preserve their stock.

"There is no patent on this discovery," said Mr. Smith yesterday; "it is free to all. I regard it of the utmost value in working out of the problem of domestic economy. The same borax can be used over and over again, and think of the amount of unnecessary domestic waste that will be avoided by preserving fruit this way. Private families, as well as hotels and restaurants, can have their borax bins at small expense in which they can constantly keep an assortment of fresh fruit."

"The experiment is as yet in its infancy, and I am loth to claim too much for it, but from the tests we have made it is reasonable to believe the system of borax preserving will play an important part in the commercial world."

A BALDWIN MONUMENT.

The Cultivator and Country gentleman says that the Rumford Historical Association of Woburn, Mass., is having cut a granite shaft to be erected on the spot where the Baldwin apple was discovered, about one hundred years ago. The Society has purchased a small tract of land in the town of Wilmington, Mass., adjoining the farm of George L. Taylor, Jr., which includes the historic site, thus making certain that the monument will stand always. The shaft will be seven feet high and surmounted by a carved representation of a Baldwin. The inscription will be as follows:

"This pillar, erected in 1895, by the Rumford Historical Association, marks the estate where, in 1793, Samuel Thompson, Esq., while locating the line of the Middlesex canal, discovered the first Pecker apple, later named the Baldwin. Exact spot, 250 feet west, 10 degrees north."

Surveyor Thompson was attracted to the tree by the large number of woodpeckers he saw at work on it. Examination of the fruit showed that it was likely to prove a new variety, and liking the taste of the apple, Mr. Thompson and his brother Abijah took from it a number of scions and grafted a number of the trees in their own orchards. By them it was distributed among the neighbors, and in time it was largely sent to other parts of the country. It was then called the Pecker apple, for the woodpeckers that had led to its discovery. Col. Loomis Baldwin, of Woburn, became highly interested in the apple, and having a large acreage and many trees, soon had them nearly all grafted to Peckers. He had a wide acquaintance among fruit culturists, and they helped him to spread the fame of the apple, and gradually it came to be known as the Baldwin.

GROWING AND MARKETING STRAWBERRIES.

Rural World.

I have tried summer planting twice, but have had poor success with it, and would not recommend it unless you are prepared to irrigate.

Never let the weeds get a start, but cultivate before they can be seen peeping through the ground. I use the Planet, Jr., cultivator, and think it the greatest labor saving cultivator ever made. In very rocky ground, and when the plants are small, I usually take off all but three shovels, when rows are close together, as this will prevent throwing dirt or stone on the plants. Where ground is free of rock, I would recommend the Planet, Jr., with ten or twelve small, reversible, and the pulverizer attachment. The hoe is an instrument that cannot well be dispensed with, and should be used frequently and thoroughly, but be careful and not hoe too deep.

One of the most important items of strawberry growing is the distance the plants are apart at fruiting time. I believe that six or eight inches by one foot in the matted row system will give as good, if not better results than to have them closer. It is easier to tell how the plants should stand than to make them stand just that way. I think that as a rule berry growers are too afraid of spending money enough on their plantations to obtain best results.

The present season I counted 200 berries and blossoms on a single plant that had plenty of room to show what it would do if it was given a good chance. Even if this plant would only mature 150 good, large sized berries, and that they would only fill one wine quart box, who is there before me to-day that

Correspondence.

TRIUMPH POTATOES WITH HAIR ON.

DALLAS, TEXAS.

Editor Texas Farm and Ranch:

I herewith hand you a basket of Triumph Irish potatoes grown for me this season, which are the largest of the kind seen by me. I planted this spring about two-thirds of the same land which I had in Irish potatoes last year. The yield this spring was more than double that of last year on the same ground. I have about twice as many potatoes as I had last summer, from about two-thirds of the same land planted in Irish potatoes in 1894. These potatoes cost me, grown and housed, 30-8-10 cents per bushel, which is something near two cents per bushel less than the same kind of potatoes cost me in 1894.

My potatoes are larger than they were last year, at which time they were grown in good rich sandy soil without any trash or straw thrown on them. This year my potato land was laid off leaving an open furrow about seven or eight inches deep, in which I dropped my potatoes and filled the furrow with hog's hair thrown in loose, covering with soil and cultivating as usual. I think that if I had had the rain in early spring sufficient to wet the hair in the ground it would have made five times as many potatoes as the same ground made in 1894. I have always had an idea that hair was the best thing that could be used in growing Irish potatoes, and your potatoes will not always be bare, but can be made so very easily.

O. F. YARBROUGH.

REPLY TO PROF. PRICE.

KERR'S, LONOKO CO., ARK.

Editor Texas Farm and Ranch:

I wrote you some time back that I would not write for publication anything connected with my seed business, except where cruel injustice or misrepresentation made it necessary for me to defend myself against the "dog in the manger" crowd. But in even noticing them I am wrong, because they never put out money to lift themselves or drive their business, but depend upon what they can get free or at somebody else's expense, consequently have nothing to lose. They mix and jumble parts of different letters written under different circumstances; they charge me with doing just what I was contending against.

Prof. Price's whole mistake in both letters comes from jumbling up Mr. A. C. Welborn, trucker of Memphis, Tenn., and Prof. W. C. Welborn, of Mississippi Experiment Station, both of which were firing across my bow for advising the cutting of seed the same as in the spring, and using medium to large seed instead of the small refuse of the market garden. Then he says he came from Gibson county, Tennessee, where the second crop business began. There are lots of people in Gibson county now that know nothing about the Triumph potato. I am also a native of Gibson county, Tennessee; so was my father and mother. My uncle traded 200 acres of land where Trenton, the county site, now stands, for a scrub cow and calf. His son is now the sheriff of Gibson county. I had another uncle that sold land from the same section for 50 cents an acre, and \$1000 per front foot where the city of Memphis now stands, and a very large per cent of the truckers of these two sections are my kindred, and are now, and have been, in direct correspondence with me since my move from Tennessee. I have shipped the Triumph potatoes back there. Nearly all the truckers back there quit them. A few raised them, as they now do, for the Southern seed market in the spring. Seven years ago they had a good run in Kentucky market gardens. Now I doubt if there is a single market gardener in the state who raises them. Mr. A. P. Farnsly, of Louisville, Ky., the head and front of the truckers of the state, says after more thorough trials, the Triumph had totally failed as a market garden potato, and had been discarded altogether. The same comes from the leading truckers of Memphis, where I commenced to boom the Triumph. But money in advertising and push run the boom over them and started them to raising the Triumph for the Southern seed market instead of other varieties for the North. Why I pushed this potato boom so hard until last year even Prof. Price heard of it away back on the Texas State Experiment Farm.

Now, Prof. Price, there is no way to

boom or hold up a boom of any thing, however great its merits, without some individual heads the boom, staking everything on its success. Now you have knocked me out and shouldered the Triumph boom, carrying it on a higher level. I step down and turn the gavel over to you. I surely wish you success in holding up the Triumph second crop boom where it belongs and now is fast approaching—the standard in every Southern home—and that you may be able to hold your hand against the hundreds of handsomely engraved and widely circulated potato catalogues, and by so doing save and add millions to this our own sunny South. I promise, instead of playing "dog in the manger" with you, I will assist you any way I can when it can conveniently be done without going into public print. I now leave the matter with you and the readers of Texas Farm and Ranch, and turn my attention to other matters I think of just as vital importance to the South, and advise my friends to look to you as the electric light tower on potato growing at the South.

Trusting you may be able to drive out all Northern seed potatoes at the South, and thus build up another money crop at the South besides cotton. I now gladly step down and out of the press, except in paid for advertisements on the potato business.

JEFF WELBORN.

ON MAKING HOME BEAUTIFUL.

ROCKPORT, TEXAS.

Editor Texas Farm and Ranch:

You may not understand much about landscape architecture, but if, say from your front steps, points of view have a pleasing effect, if the view a little farther off is pleasing, though different, and if the far-off view, though still different, is yet pleasing, that would be just what we meant by some of our technical expressions. And you will find this thought working out in almost infinite number of forms. Now keep this before you in all your arrangements. Even in a small city lot you would plant the higher growing trees and shrubs and plants in such way that they would not hide those of lower growth. In your plan, therefore, remember that the best should be nearest the house, then second best, and so on, your background admitting of larger and coarser kinds. Still, there are exceptions to this. In laying out your drives or walks, you may be able to plan for natural curves, which will add much; but be very careful how you try Hogarth's line of beauty, a double-shaped curve, and whatever you do, don't try "Serpentine" walks. Don't let your walks to the house meander round, or you may find some one will make a straight cut, and leave you to meander. Lay your ground so as to very gently slope from the house, whether your plot be large or small, excepting when of some extent. Then the lawn proper should be treated by itself, only that it should be so planned as to appear as a part of the whole. Nothing can take the place of grass for the lawn, and as good grass cannot grow on poor soil, make your soil good, rich, deep, and if you wish to have your lawn look as neat as a new pin, mow it as often as needed, leaving the cut grass as a mulching, and if the weather is dry, give a good soaking of water. But to have it mow as it ought, you must lay it, as regards the sod, level as a floor; don't depend on a roller to do this. Get a flat-faced block of wood with a handle, like a rammer, heavy enough to beat down the high, lumpy spots. Do it when wet, or wet it, and lay on. If you have not got a level eye, then use a long straight-edge and spirit-level. Be careful to edge the grass along your drives and walks and beds neatly, and keep it so, as there always is a tendency for grass to creep in if not watched.

For your drives and walks you will have to use what you best can to make them solid and clean. Let your beds be so arranged as to have your lawns only cut into where a bed would have a striking effect, or along boundaries, or near the house.

We are now ready to consider Beauty in Creation; or Natural Advantage:

There are many homes that have such beautiful natural advantages that all that is needed is to give a few finishing touches. If you have those, don't neglect them; fill in a little where needed, but don't undo nature's landscape work to substitute your own. A short time ago, in one of our leading cities, there existed an old quarry, no longer being used for building material; it was condemned. I said to the mayor, "Put that into my hands, and I will make it into one of the most beautiful spots in

your city." Another of the city council considered himself a landscape equal to this, and between scraping down and filling up, he succeeded in leaving a much worse nuisance, after spending the same amount it would have required to make and finish a pleasure resort for the city. In another part of the state a board of managers was appointed to lay out a square of ground surrounding one of our large public buildings; the grounds had the very best of natural advantages, but the board employed an incompetent man, got a plan that was unsuitable, undid much of what nature had done for them, and spent thousands of dollars ruining a grand opportunity. If you have not natural advantages, you must create, and the more natural the better.

What do I mean by creating?

Well, stand at your front door, or sit on your veranda and look out; however far or limited, the distance is all bare and naked. So much more will be demanded of your creative power; it will be yours now to conjure up some pretty picture that will fit in to and become a part of your perspective, that will fill this space here, that will mask that objectionable thing. Then go to the windows of different rooms and see how each will give a new opportunity. Then reverse this by looking to the house and grounds from the street, or from different points of approach, and see if you cannot create some pictures in perspective as seen from these different points of view, and in this size is no object. A small picture may be as beautiful, often is more beautiful, than a large one. Now we begin to reach the poetry, and it largely depends on you, gentle readers to give us an idyl in flowers. If your place is of some extent, walk around and see what surprise can be created here, what gap filled yonder, or what is needed to give finish and make it an ever varying source of pleasure.

Your place very limited?

How many of those scenes of humble cottages and cottage gardens you have seen painted, and longed for just such a beautiful and quiet resting place. Has it occurred to you that those scenes, those pictures, are not the creations of the genius of the painter? They are the creations of the humble genius of outdoor life, likely an unlettered son of toil, a widow or a home-bonded invalid. Theirs was the picture, bis the copy. Go and do likewise.

WM. LOMAS.

PEACE AND PLENTY.

WAXAHACHIE, TEXAS.

Editor Texas Farm and Ranch:

The splendid rains we have been having recently, and the splendid condition of our crops, are causing us once more to feel good generally. It has been a long time since I saw so many smiling faces. Oats were never better, and harvesting has begun in good earnest. Wheat is very fine, though the acreage in this immediate locality is small. Much of the corn crop is now past the danger line, and will make 40 to 60 bushels per acre. Hogs are more plentiful than usual, and of better quality, and why should we not be happy? And just here I want to say to the many parties who have been writing to me recently about Texas, don't ask any more questions. If you mean business, come on to Texas, and when you get here, buy you a home, if it is only a small one, roll up your sleeves and go to work; keep out of politics, buy you a few good Berkshire hogs, Jersey cows and Langshan chickens; don't buy anything on credit unless it be a home. Don't try to put on too much style and live above your means; don't try to make people believe that you left the best country in the world when you came to Texas; don't find fault with everybody and everything, for I'll bet you a dollar that it will be easier for you to conform yourself to your surroundings than to conform the surroundings to your way of thinking. Look around you and see the thousands of men—farmers—who came to Texas a few years back poor, who are now prosperous and happy, and go thou and do likewise. If you are in the habit of going into saloons and taking a drink, you can do as you please about it, but I would advise you to leave that habit in the old country; it don't pay out here, morally, socially, or financially. Now you can do just as you please about coming to Texas. We have plenty of room for good families, but we are going to get along all right whether you come or not.

Our best farmers here learned long ago that there was money in staying at home and attending to their own

business. Others are falling into line and are getting down to business, and it is this state of affairs that is bringing so much prosperity and good cheer throughout our land.

Say, Brother Editor, isn't it strange that our wise law makers can't figure out and enact some law or laws that will make all the poor complaining cranks throughout the country rich without any effort on their part? If you or any of your correspondents can think up such a law or laws, please give it to us, and hush complaining of the fellows whom we have employed to grind out our laws for us. It is true that no one has ever heard of such laws, but there surely can be such enacted, from the amount of fuss that is now being made at the laws we have. I did think of running for President of the United States, but if the fussy fellows don't hush up so much noise, I won't run, and if the office is forced upon me, I won't accept. I could not stand so much racket.

I hear a good deal of complaint of sunstroke up North. Does it ever strike any one in this country? I am sure that it struck at me the other day. It was this way: Wife made me take a scythe blade and go out to cut some weeds. I thought the sunshine looked a little dangerous, and so did she, they say. I went, and cut weeds for about two hours, and the sunshine kept getting hotter; and I kind o' believe till yet that the sun struck at me, and if it had not been for the shade of a peach tree, I believe it would have got me. I told my wife all about it when I got to the house, and she got scared up a little about it, and has now decided that I must not go out into the sunshine to work any more till the weather gets cooler. Aint I in luck?

UNCLE SNOOT.

NOT AS BAD AS IT MIGHT BE.

BOWMAN, TEXAS.

Editor Texas Farm and Ranch:

Since the 8th instant, we have had a great deal of rain. Every tank and stream is full and overflowing, the first time since early in May, 1894. The rain came too late to do oats and wheat much good and there will be little if any of the latter harvested. Corn suffered greatly from drought, and from present appearances the best will only make half a crop. What cotton is planted looks well, only a little late owing to drought and backward spring. A large acreage of field crops is, and will yet be planted, such as sorghum, Millo maize, African millet, Jerusalem corn, etc., and if the season is favorable for these crops the farmers will tide over the winter all right, as by raising a great deal of fodder crops they can make some money either by feeding cattle or by selling it to parties who are feeding stock for market, and from present appearances they will all make grain enough for seed, or nearly so, with, perhaps, the exception of wheat. I would like to try a little of the Mexican June corn, if I knew where I could get the seed. I do not see it advertised, and I hear and read a great many reports regarding it, both favorable and unfavorable, that my curiosity was aroused concerning it, and I have concluded to try it at the first opportunity. Success to TEXAS FARM AND RANCH.

W. H. BACHMAN.

THE NEW CEREAL.

BONHAM, TEXAS.

Editor Texas Farm and Ranch:

I notice in your issue of the 8th an article headed "A New Cereal," as copied from Columbus Herald, of Alabama, and described as a very important discovery, that of the common swamp, or fishing pole cane, bearing seed. While it is a very unusual thing for cane to bear seed, my memory leads me back to about the year 1842 or 1843, when a boy in the State of Georgia. All the cane in a large cane brake near where my father lived, bore seed and died—not one was left that bore seed. My recollection is that hogs got fat on them, and that what seed was left germinated and came up, but the old cane brake was soon put in cultivation. I left the county in 1849, so that I know nothing further of the result. This was in Carroll county, Ga.

I will further state that on my present farm and an adjoining farm there is quite a lot of cane, and last season it nearly all bore seed, and is now dead, and at the present writing the balance has seed on it, and of course will die. This is my experience of more than sixty years. I recollect my father had never heard of such a thing before.

E. H. ADAMS.

ready, but it is always best to prepare them for the change by gradually increasing their feed and when the sow shows that she is weaning them, give them all that they will eat up clean. If considered necessary to wean the pigs, confine the sow in a close pen, but give the pigs good range, feeding liberally.

Stock of any kind that gives good evidences of health and thrift always has the advantage of animals that are in a failing condition. Whether the animals are to be fed to maturity and then furnished for market, or are to be sold whenever a fair price can be realized, it will always prove good economy to keep thrifty to secure a good development of bone and muscle.

Necessity often brings about many changes in the feeding and management that would not come about in any other way. When there is a partial failure of the corn crop, we are often compelled to use something else in its place to grow and fatten the hogs. In doing this we can often learn what feeds will secure the best gain at the lowest cost. When corn is plenty a large class depend on it so entirely that little or no attention is paid to anything else.

Eldon, Mo.

FIBER CULTURE IN TEXAS.

[This is an open letter to Mr. Henry Nehrmeyer, of Reinhardt, Texas, by Felix Fremery.]

With much interest I have read your correspondence in issue of March 16th. From its tenor I draw the conclusion that you are in favor of diversifying your crops, in order to escape commercial annihilation from the effects of overproduction of cotton, which too long has borne the high title of "king."

In 1873 the U. S. Department of Agriculture sounded the first alarm against unreasonable increase of this crop, "or hardships must ultimately ensue." Its prediction has been fulfilled to the letter, notwithstanding the repeated earnest warnings of a great many far-sighted people, prominent among them Mr. Frank P. Holland, of TEXAS FARM AND RANCH. Cotton has ceased to be justly considered by the Southern farming community "the only true friend he has to depend upon." The ruin which it has created of late years, and the uncertainty of its future, should compel every planter in Texas to reflect twice, or three times, before concluding to continue an industry which, by so many unaccountable elements involved in its production, promises everything but stability or prosperity.

Instead of so much cheap advice, you want the introduction of other crops, paying crops at that, and you mention jute and ramie culture.

Ask the U. S. Department of Agriculture to mail you immediately Report No. 1, A Report on Flax, Hemp, Ramie and Jute, 1892. In perusing this pamphlet you will, on page 66, find the following authentic assertion: "There is no reason why hemp culture should not be extended over a dozen states and the product used in manufactures which now employ thousands of tons of imported fibers. In the manufacture of binder twine alone there is an outlet for upwards of 50,000 tons, equal to 100,000,000 pounds of hemp annually. The twine is now made from Manila and Sisal chiefly, the first being no better than hemp, and the last quite inferior, and as hemp runs 100 feet more to the pound than Sisal, there is an advantage of 17 per cent. in favor of American hemp."

American hemp does not do well in the South, but Japanese hemp does. We have imported seeds from Japan and acclimatized it in Southern Texas, where it grows wonderfully, reaching the height of fourteen feet. Its fibers are finer, glossier and stronger than those of American hemp, and from them can readily be woven linen as strong and as fine in texture as that made of Irish flax. This species of Cannabis Sativa is extremely prolific, growing in this California city during last summer, 10 feet in 62 days from the date of sowing, and 15 feet in 92 days, although planted as late as May 29th. Induced by this, I resolved to try it as to its capability of making two crops during one season. The seeds were accordingly sown as early as March 14th, and to-day the stems are 10 feet in height. By June 15th they will be cut, I suppose at a height of some 13 to 14 feet, and immediately fresh seeds will be sown on the same tract of land, this time with the help of mulching, and no doubt but that the second crop will be cut by end of August at not less a height than 10 to 12 feet. In case of the realization of our well founded expectation, Japanese hemp will yield in Southern California—and we suppose in Southern Texas

too—at least 24 feet of full grown stalks, or just as much as American hemp will produce in three years from the same tract of land in Illinois, Kentucky, New York, New Jersey, etc.

Part of last year's crop was satisfactorily decorticated by the circular knife machine, in proof of which we have mailed you to-day the testimony. In figuring from the trial, the net yield of marketable fibers ready for the spinning frame will amount to 1800 pounds from one crop per acre, which can be raised and prepared at an expense of \$33, transportation of 500 miles included, or to 1.95 cents per pound.

We entertain no doubt that in future we will raise the yield of absolutely clean fibre to 2000 and even to 2200 pounds from one crop on one acre, or from 4000 to 4400 from two crops, when, the lower yield admitted, the cost price will not exceed 1.95 cents per pound; in the second case, 1.70 cents per pound. Actually double dressed Kentucky hemp, at primary stations, by the New York Cordage Trade Journal is quoted to be 8 to 8½ cents per pound; single dressed at from 7½ to 8 cents per pound. Right here I wish to draw your special attention to the fact that the circular knife decorticator, apart from wasting no fibrous material, whatever the machine, in cleaning most perfectly the ligneous parts from the stems, produces no tow at all, while by the old process about 50 per cent. of tow is produced, worth only half the price of the clean fiber.

It would be a pity, indeed, to use so wonderful a fiber in every respect as that derived from Cannabis Sativa Japonica for so coarse fabrics as binder twine, or grain sacks, or burlaps, when it is so well fitted for household linen of every description, for sail cloth, collodion, celluloid and a great many other useful articles, and when once in vogue among the laboring classes for certain indispensable garments as, for instance, shirts or stockings, on account of its enormous strength and durability, the "cheap John" cotton fabrics, that in many cases are not worth sewing, will receive a deadly blow, from the effects of which they will probably never again recover.

For binding twine we have another and more suitable indigenous fiber, derived from the Abutilon venicosum, or Indian mallow, and which we call bute. This plant grows wild in Missouri and other Northern states. For twenty years Professor Waterhouse, of St. Louis, has strongly advocated its culture, and in 1882 the Legislature of New Jersey offered a bounty of \$5000 for its extension; but as at that time we had by no means so efficient and cheap peeling machinery as to-day is at our command, the matter dropped, until a few years since, when, at the request of our National Department of Agriculture, we took it up again, starting with a few pounds of seeds received from said Department. In 1893 we succeeded in raising in South Texas, Galveston county, stalks measuring nine feet, and in 1894 we raised it here in Southern California as high as 14 feet, with stalks as smooth as an arrow and from three-fourths to one inch in thickness. The fiber is coarse, glossy and somewhat stronger than Indian jute. At present we are experimenting with this plant on different places of Kern county, and in time will report the result. In the meanwhile we would advise you to study Report No. 6, on the Uncultivated Bast Fibres of the U. S., Washington, D. C., 1894. In this booklet the Abutilon venicosum is given a prominent place, so I refrain from its description, and wish only to state that all fibrous stalk plants, for obtaining a large yield of marketable filaments, require much more moisture in the soil, and many of them a damp climate.

For a series of years it seemed almost as if American farmers had pledged themselves never to undertake the culture of so valuable fibrous plants as ramie and jute, and every effort of voluntary promoters or of experts to demonstrate the feasibility, was halted with uttermost distrust, while the inventor of any new peeling apparatus, in trying to make its efficiency known, came nearer to being grossly insulted than to be listened to his explanation and to be witnessed at his experiments and oculum. In Texas they were mostly Germans, who in their body-journal, the Frie Presse fuer Texas, of San Antonio, tried to blacken every agricultural and mechanical or chemical progress in this respect. Whatever the cause may have been, the fact remains that the tables have partially been turned, and gladly we will grasp the offered occasion to contribute our share,

to the best of our ability, in the promotion of these industries.

To start with, we offer you, free of charge, five pounds of fresh Japanese hemp seed, and as many pounds of Abutilon seed, express expenses to be defrayed by you. These quantities are sufficient to cover five acres of each for seed raising this season. The hemp will yield, if properly cared for, from 1000 to 1500 pounds of seeds per acre, and the Abutilon from 800 to 1000 pounds; and as about 45 pounds of seed are needed to cover an acre for fiber culture, it is obvious that quite a number of acres can be planted by next spring from the seeds raised this year.

The California climate being absolutely too dry for jute culture, our trials with this plant were crowned with no success, and we hardly raised seeds enough for continuing both species. We will let you have a small quantity of these seeds, or you may have five pounds of each the Capsularis and the Olitaris from our store in Arcadia, Texas, gratis, of course, and only express expenses at your charge.

The failure of the jute culture in Texas several years ago was by no means due to the inefficiency of the decorticator machines. In Yorktown some 45 acres were grown, a great many stalks reaching the length of 18 feet; in Kyle, 145 acres were planted, that grew to an average height of 9 feet, and this same proportion was reached on 20 acres at Weatherford. But when the harvesting time arrived, it was found out that no decorticator at all could be had. Mr. Jules Juvenet, of New Orleans, the owner of the Le France decorticator, having broken his contract.

So beautiful and strong were the jute fibers grown in 1892 in Galveston county that the United States Department of Agriculture purchased quite a lot of them at the rate of 10 cents per pound. The growth of the plant was marvelous. The stems were decorticated by the circular knife machine, and the ribbons simply water-rotted. A mattress made of this stuff, after having been in use for two years, does not show any sign of wear or tear, and we expect it to last six or eight years more.

Jute requires moisture in the soil and in the air, conditions prevailing in East and South Texas. I planted in rich land, with provisions for irrigation. A yield as high as 4000 to 5000 pounds of first-class fiber per acre can safely be expected. As jute fibers, not jute butts, although very low in price at present, sell at 3 to 3½ cents per pound, and as their culture and preparation do not exceed those of hemp, the clear benefit of this crop is easily figured out. Here is a magnificent opportunity offered to a man of intellect and enterprise.

In case of our offer being accepted, more explicit explanation will go with the seeds, and we expect Mr. Nehrmeyer will not only hunt for desirable co-operation in his trials, but also publish results in the columns of our pet journal, TEXAS FARM AND RANCH.

This being the most unfavorable season for raising ramie, either from seeds or from roots, we shall at some later date take this matter up.

Bakersfield, Cal.

HOW TO TELL HOG CHOLERA.

Symptoms of hog cholera are described by the Iowa State Board of Health as follows:

The presence of the disease is indicated by a cold shivering, lasting from a few minutes to several hours; frequent sneezing, followed by a loss of appetite; rough appearance of the hair, drooping of the ears, stupor, attempts to vomit, tendency to root the bedding, to lie down in dark and quiet places, dullness of the eyes, often dim, sometimes swelling of the head, eruptions of the ears and other parts of the body; dizziness, laborious breathing, vitiated appetite for dung, dirty and salty substances; accumulations of mucus in inner corner of the eye, discharge from the nose; fetid offensive discharge from the bowels, offensive exhalations; diarrhoea discharges are semi-fluid, of grayish green color, and often mixed with blood. In many cases the skin of the belly between the hind legs, behind the ears and even on the nose, has numerous red spots, which toward the fatal termination, turn purple. As the disease progresses the animal becomes sluggish, the head droops, with the nose hid in the bedding. If there has been costiveness, about two days before death there will be offensive fetid discharge, the voice becomes faint and hoarse, the animal is stupid, excitation increases rapidly, the skin becomes dry, hard and very un-

clean; there is a cold, clammy sweat, and death soon follows with convulsions, or gradually by exhaustion, without a struggle. In chronic cases, or those of long duration, the animal becomes weak, lies down most of the time, eats but little and has diarrhoea. These cases may linger for weeks scattering the poison of the disease in the discharge wherever they go.

NEW HOG LAW.

The following is the full text of the McKinney hog law:

Article 4606. Any owner, lessee, or person in lawful possession of enclosed lands shall be entitled to the following fees for impounding stock, to-wit: Ten cents per day per head for hogs, 10 cents per day per head for goats, and 5 cents per head per day for sheep. The damage done by such stock, if any, and the fees due to the taker-up of stock, if any, may be assessed by any three disinterested freeholders of the subdivision in which said stock is taken up, who shall upon the application of the taker-up of the stock, be appointed by the justice of the peace of the precinct in which such subdivision is situated. Where said justice shall fail or refuse to make such appointment, or where the stock law has been adopted by an entire county, said freeholders shall be appointed by the county judge of the county. Said freeholders, after being duly sworn to discharge with impartiality the duties devolving upon them by said appointment, shall proceed, after hearing the evidence, to determine whether or not any trespass is prohibited by the provisions of this chapter has been committed and to ascertain the damages, if any, occasioned thereby, and the fees due to the taker-up of the stock by reason of said trespass, and shall make an assessment of said damages and fees, in writing, and signed by said freeholders, or two of them, and verified by the affidavit of said freeholders to the effect that said assessment is just, and that they have no bias in favor of or prejudice against any party interested therein, and shall file said assessment with the justice of the peace, which shall be final; provided, that the owner of the stock, if known, shall have five days' notice of the time and place of the meeting of said freeholders, and if the owner is unknown, then a written notice thereof shall be posted in two public places in said subdivision and one at the door of the court-house of the county; and provided further, that nothing in this chapter shall be construed to deprive the taker-up of the stock of the right to enforce by suit in a court of competent jurisdiction, any claim he may have for such fees and damages and to subject the stock so taken for the payment of the same, under the provisions of this chapter.

Article 4607. After the filing of the assessment, as provided for in the preceding article, the constable of the precinct shall sell such stock at public auction for cash, after having given notice of such sale as in constables' sales of personal property, and apply the proceeds of such sale, after deducting the expenses thereof to the satisfaction of said fees and damages, and shall pay the balance, if any remains, to the owner of such stock. The justices and constables shall each receive for their services the same compensation as is allowed for like services in civil cases.

Article 4608. If no owner can be found of stock so impounded, the taker-up may make affidavit before a justice of the peace of the county describing the stock impounded by him, and that the owner is unknown to affiant, which affidavit shall be forthwith delivered to the county clerk by such justice, to be kept in his office for inspection. After the filing of such assessment the constable of the precinct shall sell such stock, as in case where the owner is known, and if anything remains after satisfying the expenses of said sale and the fees and damages due to the taker-up, he shall report the same under oath to the clerk of the county court and pay the same over to the county treasurer, to be received and disbursed by him as in case of sales of estrays, or the taker-up may, at his option, after the expiration of five days, estray such stock according to the laws regulating estrays in this state.

NERVOUS SYSTEM AND MILK FLOW.

Farmers' Voice.

The influences operating through the nervous system affecting the secretion and flow of milk are numerous. Briefly they are as follows: Natural excitation of the nerves of the teats and udder increases the secretion. It is going on all



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TEXAS FARM AND RANCH is the official medium of the organizations given below:

State Horticultural Society—E. V. MUMFORD, President; DENISON; E. L. HUFFMAN, Secretary, Fort Worth.

State Swine Breeders' Association—W. H. PIERCE, President, Denton; A. A. FITZGERALD, Secretary, Dallas.

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

Texas Jersey Cattle Club—J. D. RUDD, President, Waskom; J. O. TERRELL, Secretary, Terrell.

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

A CALIFORNIA bee-keeper recommends the use of folded newspapers to cover the brood chamber to conserve the heat, but he draws the line at political papers, because the lie in them would be disastrous to the brood.

THE difference between an alleged and a real statesman is, that the first only sees the present time and his own interest, while the latter sees far into the future, and works for principles that endure. The woods are full of the former while the latter seems to be a back number.

A GREAT many people pick up bad habits just to show how much backbone they have by quitting them—after a while. Then a woman comes along and marries him to reform him. And you may bray two fools in a mortar with a pestle, yet will not their foolishness depart from them.

CHICAGO is not satisfied with Cook county, but desires to spread herself eastward. The big "drainage canal," ostensibly to dispose of the city's sewerage, is now said by envious New Yorkers to be for the purpose of draining Lake Michigan, so the city can extend her municipal empire over the reclaimed waste of waters. It is well for ocean traffic and travel that Chicago is, as yet, fifteen hundred miles from the sea.

COL. W. E. SKINNER, general manager of the Fort Worth Stock Yards, has issued a circular letter to farmers and feeders of Texas on the subject of hogs. He states that, whereas four years ago it would have been impossible to have gathered at any live stock center in Texas 200 hogs per day of improved breed and quality, that now it might be possible to gather 1000 hogs that will

compare favorably with those received at Northern markets; but this number is only about one-tenth the number required for home consumption. It would require 10,000 per day for this state alone. Thus it seems there is really little danger of an over-production of hogs in this state. True, hog production is rapidly increasing, so, also, is population. When the hogs overtake the people, and there begins to be more of the former than are wanted, we will let our readers know, or our heirs will.

ACCORDING to the best evidence attainable there are not less than 25,000 people in the city of San Francisco out of employment, and dependent upon charity or crime for sustenance. This information does not come from San Francisco papers, but from private letters from reliable residents of that city. When you are after facts you don't want to go to papers interested in concealing them, for you will surely be left. The Pacific coast has had too much boom, and is suffering from the collapse.

THE June crop report of the Agricultural Department shows a reduction in the area of winter wheat of nearly 5 per cent, a small reduction in spring wheat, and a 14 per cent reduction in cotton. The condition of winter wheat is low, of spring wheat high, and of cotton the average is 81 against 88 3 last year. The acreage of rice is slightly increased over last year, and the condition is good. A larger area is in oats than last year, and the condition is given about 3 per cent below last year. For Texas, oats showed an increase in area of 15 per cent, and an average condition of 73.

WE would like to have some experiments made in the cultivation of wheat. Drilled in rows eighteen inches apart, a light cultivator might be run through with a single horse. A few years ago Dr. N. N. Allen, on his plantation in Waller county, planted an acre in this manner, and although the crop was not harvested, samples were shown to old wheat growers from the Western States, who declared that they had never seen any wheat equal to it. Some said that such heads ought to make from eighty to one hundred bushels per acre. We have long thought that our usual yield of wheat is ridiculously small, especially when we read in ancient history (confirmed by many writers of that day), of yields of forty, fifty, seventy, and even one hundred fold. Think of it, farmer, 100 bushels from one bushel sown! Are we not behind the ancients in some respects?

IT is now stated that the reported massacre of Christian missionaries in China was greatly exaggerated. The property of the missions was destroyed, but very few of the missionaries were killed. They were driven in terror out of the province; that's about all. Many valuable lives, hundreds of thousands of dollars and untold hardships have been used and endured to Christianize these dirty heathens, and after all only about one in every two hundred thousand of the population are even professed Christians. Is not Christendom paying too much for a Chinese whistle? Twenty thousand well armed infantry, with a brigade of cavalry, some artillery and a few gun boats would do more to prepare China for the gospel than all the missionaries that may be sent there for a hundred years. And the cost would be no greater.

MERCHANTS, and the daily papers who depend upon merchants for patronage, are protesting vigorously against the Bramlette law passed by the last legislature, calling it an "indirect way

of doubling taxes." It strikes the casual reader as a very direct way of doing it, as it compels, under the sanction of a judicial oath, a correct rendition of taxable business. It is claimed that the evasions of the law heretofore practiced by merchants, has all the force of established custom and time honored precedent and should not be interfered with. The fact is, the pre-existing law has not been changed; the Bramlette law, to which so much opposition is manifested, merely cuts off the subterfuges by which the law has been evaded. The property owner whose taxable assets are all in sight, cannot sympathize with those who kick against a law that compels others to bring to light that which has heretofore been hidden.

THE probable result of the war between Japan and China will be to open up that great Oriental bee-hive of 200,000,000 of busy workers to compete with the manufacturers of Europe and America. If the Chinese should turn their attention in this direction, it would mean something. They can work sixteen hours a day, and can live on a cup of tea and a few spoonfuls of rice, and are not at all particular about clothing or housing, and as for wages, a Chinaman will toil assiduously for five or ten cents a day, and out of that save enough to bring him to this country in a few years. They are the most imitative and ingenious people in the world, and have only been held in the background by their absurd ignorance, egotism and policy of non-intercourse with "western barbarians." With a population outnumbering that of all Europe, with a specialized instinct for cheap production, should they enter the field of manufactures, will they not be dangerous competitors for the wealth of the world?

WORK on the Fruit Palace is occupying the attention of the people of Tyler. The architect assures the public that it will be ready for occupancy by July 5th. The price of admission has been fixed at 50 cents. People who wish to see East Texas on dress parade should visit the fruit palace and have their mouths made to water for the good things on exhibition. It is estimated that the East Texas peach crop alone will this year crowd the million dollar mark. The writer of this paragraph has for years contended that East Texas is the best part of Texas for diversified soil products—and that means the best in the world. The section has exercised too little self assertion. The people knew they had a good thing and were contented, even to the extent of letting some other sections get ahead of them in certain respects. The land boomer and the speculator have never taken a firm hold on East Texas soil, but the country has no less natural advantages on that account. What is needed is for these people to "blow their own horns" a little more and a little louder, and thus let the world know "where they are at." That is partly what the Fruit Palace is for.

"FRESH FROM THE VINE."

HEMPSTEAD, TEXAS.

Editor Texas Farm and Ranch:

I express to you in time for Saturday's delivery a 29-pound Kolb's Gem watermelon, the first to ripen in open field culture in Waller county, grown by Joe Chapman, the first shipper of melons from this county. I attach the handle of my own device. This is the first melon raised by this device. If you want to eat this melon just as it leaves the patch of an early dewy morning, hang the melon by the loop above handle, where a current of air strikes it; wrap melon with wet cloth or towel for an hour or more, and you restore the melon to the temperature at which it goes best. It is better than icing a melon, and much cheaper. Instructions for cooling melons will be on the han-

dles that go out as premiums to the Bulletin. You see that I am trying to create an increased demand for watermelons by improved handle and improved cooler.

Next week will be as soon as I can get a loading scene for your paper.

E. CREW.

[The foregoing explains itself. The melon was delivered according to programme, and eagerly devoured by TEXAS FARM AND RANCH force. The handle is a most convenient device for handling melons, and is a marvel of cheapness and simplicity. Hundreds who have refrained from buying a melon because in a state of nature they are the most difficult thing on earth to carry home, can now buy two, and taking one in each hand, leisurely ramble homeward and arrive safely with both intact, an impossibility without this handle, or some similar device.—Ed.]

QUESTIONS AND ANSWERS.

Can you tell me what I can put on my ovals to keep the little horns off of them. I have tried train oil and pennyroyal to no purpose. Please give me a preventive if you can.—R. T. COLE, Shreveport, La.

Ans.—Try Shoo-fly. We know nothing better.

Having noticed that there is a variety of corn called the late June corn and that it can be planted in June and will make corn by fall. If there is a corn that will do to plant this month and will make corn, information as to where I can get seed and how to plant will be thankfully received.—ELLIS J. LESLER, Decatur, Texas.

Ans.—Address M. A. Bonner, Bayou la Chute, La., or Texas Seed and Floral Co. for seed and particulars.

Why is it that the busy housewife finds it so difficult to get the "butter to come" in hot weather. It seems to require more than double the labor to churn at this season of the year than in the winter time. At what temperature should milk be churned, and the best method of a certain it? What thermometer is used?—MRS. G. B. WILSON, Van Alstyne, Texas.

Ans.—There ought not to be much trouble about it if the cream is properly ripened and churned at about 58 degrees F. A thermometer is necessary. You can get one by addressing the Creamery Package Company, Kansas City, Mo.

Enclosed you will find a piece of oiled paper, bearing the fac simile of a piece of "striffin" found on the leaf-fat of a hog killed near here. Of course it is not exact, but as near as could be traced. The facet where letters are is a dark brown color, and letters are perfect. Please give me your private opinion as to how the letters were formed. I know the parties who killed hog and know it is no fake. If you care to see the original piece—perhaps I can get it for you if you will return it—R. L. WILSON, Thornton, Texas.

Ans.—The fac-simile shows plainly the outlines of an S and B. The "striffin" or membrana covering the leaf-fat of hogs is often mottled and clouded, caused by the uneven deposit of tissue. It would not be difficult to find many markings in apparent imitation of many things in nature and art. It would be stranger still if no such coincidences ever occurred. Our "private opinion" publicly expressed, is that the letters were formed by the ordinary operation of nature. We do not care to see the original, though it is really curious.

Wish you would please tell a subscriber through the columns of your paper as to the time when to cut and method of curing such grasses as the buffalo grass, German millet and Johnson grass. Also the most approved method of handling sorghum for hay or roughness. An answer to the above will oblige.—URAS A. MENLY, Banquette, Texas.

Ans.—The best way to cure buffalo grass is to pull it by hand, as the Mexicans do. It grows too close to the ground to cut. German millet should be cut while in bloom to make the best hay. This, of course prevents the maturity of seeds. Johnson grass makes good hay if cut when small and tender. It should be cut often. Delayed too long it becomes woody. Sorghum cane requires careful handling on account of its succulence, and must be cured slowly the actual process depending largely upon the weather. After thorough wilting it can be shocked loosely and allowed to remain until ready for the stack. Sorghum is best cut and fed green. It can be cut three to four times during the season.

Please inform me where I can procure some Bermuda seed and price of same. Also best time to sow for pasture, and how many per acre.—R. M. GRIFFIN, Loneoak, Texas.

Ans.—Southern seed dealers generally keep Bermuda seed. See advertisements in this paper.

Please inform me where I can get the "Bald" or "Beardless" barley for fall planting and how much to plant to the acre. Want to plant twenty acres if I can get seed at a reasonable price.—D. O. KIRKLAND, Junction City, Texas.

Ans.—Holladay & Co., Dallas, Texas, have it—\$1.75 per bushel.

Ueckert, G. Shires, G. W. Barclay.
Sergeant and battalion clerk: Cadet Bryan.

Sergeants: Cadets Todd, McFarland, Ledbetter, Conner, Roberts, F. Shires, W. H. Clark, Mathis, Salver, Spears, W. Chiles, Faust, Foote, Rollins, Couch, Post, Cavitt, W. E. Lane, J. Y. Lowry, Knolle, Cotton, Campbell, L. Williams, Wheat, Nelson, S. Clay.

Corporals: Cadets Barnes, Gilbert, Homan, Eben, Rochelle, Estep, Flowers, Grimes, McGee, Childress, Farley, W. A. Harrison, Hoskins, R. Lanert, Marback, Granger, Curry, Burton, D. Moore, H. H. Foster, McCormick, Tallafiero, Dahlich, Sterns, Stacy, McCord, Robinson.

The following cadets were awarded gold medals as a result of the competitive drilling to best drilled men.

In battalion, Cadet Gross.
In Company A, Cadet Painney.
In Company B, Rodriguez.
In Company C, L. Williams.
In Company D, Sternberg.
In Ross Volunteers, Cadet First Sergeant Gross. B. C. PITTRICK, '94.

VETERINARY.

When veterinary advice is desired by mail and without delay, Dr. Foster 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 its turn.

Please favor me with a little information in regard to training an animal's horns: If you want the animal's horns to turn in (curve towards each other) would you scrape them on the inside, the way you want them to turn, or outside?—P. MANN, Chilton, Texas.

Ans.—The horn is scraped thin on the side to which it is wanted to turn to, then it is heated thoroughly by applying hot cloths to it covered with rubber cloth till the horn is softened. A large boiled turnip is often used. Then the horn towards the point is bent as near the desired shape as possible and let cool when it will retain the shape it cools in.

I traded for a horse, about ten years old, last winter. He had a cough then, was running at the nose and breathed hard—said to be setting well of the distemper—was in good flesh. At the time of the second snow he was about well of the distemper, but he then seemed to catch a fresh cold, losing flesh very rapidly until he became very poor. I thought he would get well when settled warm weather came, but the disease still lingers with him. At first he had a slight discharge similar to that of distemper, but he did not cough; breathed hard and grunted. He was weak and dull, any slight exertion causing him to sweat freely and his hair to become rough. He is now in better condition every way, but still has a slight watery discharge from the nostrils. There is a puffing swelling about each eye and there are small indented lines at the lower corner of each nostril. Not much hair on cheek bones. I wish to know what the name of the disease is; if it can be cured and how to treat it.—F. L. WINGALL, Albany, Texas.

Ans.—Your horse probably suffers from catarrh, but for fear it should be something else, you had better feed and water him by himself and give him a drachm of chlorides of potassa twice a day for a month or so, plenty of grass and good water and steam his head occasionally.

I have a cow with her second calf which we sold to the butcher a week ago. It was six weeks old. The cow gave plenty of milk up to the time we sold the calf. Since that time she will not let down the milk, although she seems to have plenty of milk yet. We gave her another calf, but still no milk. Is there no remedy, and will she dry up entirely?—BITCH COOK.

Ans.—We know of no remedy to make a cow let down her milk under the foregoing circumstances. She will likely get over it in a few days more. We never knew one that did not, and it is a common thing among cows to hold up their milk after removing the calf from them.

I treated a horse a few days ago which had been sick eight days. When first taken was stiff all over, skin tight, chewed his tongue and grated his teeth and pawed; seems to be very nervous; did not eat nor drink. He died the eleventh day. I cut the horse open. The right lung was two or three times as large as it should have been. It was black, soft, and the cells full of yellow matter. The left lung was not much affected. The liver looked very much like the right lung. The stomach and meat looked all right. Nothing in the stomach but the bile. The hind gut was full of a hard substance. The other entrails were empty. The heart was large and soft with yellow water around it and all through the horse. His pulse high all the time. Please name this disease and oblige.—N. W. HOLCOMB, Simonds, Texas.

Ans.—Conjestion of the liver. The condition of the lung was secondary and due to the percolation of blood after death that lung being on the side he laid on.

I have a fine horse which had a sore eye when I bought him several months ago, and I have never found out what was the matter. He keeps it about half shut, and sometimes several days at a time it will run a thick water. He can see very well. The eye looks dull and you cannot see in it good. I think it must be something like a cataract. Please give me a remedy and also inform me how long after a

sow has brought pigs before she can be bred again.—R. E. MOORE, Pittsburg, Texas.

Ans.—Bathe the eye well in clean hot water three times a day when sore, and apply the following with a camel hair brush: borate of soda, six grains; morphia, four grains; cocaine, fifteen grains; atropia, two grains; distilled water, one ounce. Put five or six drops of the lotion in the eye at a time. Breed your sow as soon after as she shows disposition to mate. There is no set rule.

Please inform me through your paper what will benefit my cows bag. Twelve months ago her bag was very much swollen and continued so during the year, and this spring she has a young calf, and her bag is swollen and she does not give milk enough for the calf.—J. D. APPLEWHITE, Groesbeck, Texas.

Ans.—There is nothing better than regular milking and bathing the bag in hot water and keep the animal as quiet as possible.

I have a fine mare four years old. She snorts wind; is not a stamp sucker; will bow her neck and bite like she has something in her mouth and swallow wind. Has been kept in a small stable for twelve months or more, no exercise, no care whatever. Foaled a colt about six weeks ago, so it was not taken out of stall until I purchased her on the sixth of June. I am feeding her bran only; turn her in pasture with moderate riding every day. Outside of the wind sucking she seems to be all right. What can I do to stop it? What can I do to stop the thrush in her feet?—J. D. CAGN, Houston, Texas.

Ans.—1. Wind sucking is a habit and is incurable. It will not be apt to hurt her much, if any at all. 2. Pare the feet down well, apply common salt to the thrush, keep her barefooted if you can; if not, shoe with tips.

HEALTHFUL DIET FOR CHILDREN.

Demorest's Magazine.

Mutton and beef are the best meats for children, occasionally varied with rabbit, chicken and venison; veal, pork, turkey, goose and duck are not fit for their digestion; and all meats for the nursery table should be broiled, roasted or boiled, never fried. Mutton should be thoroughly cooked, so that it is no longer red; but beef is best when underdone. Experience alone can tell how much meat a child should eat. It should never be allowed for more than two meals a day—often for one only is better; and it should never be given with eggs, which provide the same kind of nutriment. The general rule for all diet should be an abundance of sweet fruits, fresh or dried, green vegetables—those growing above ground receiving the preference—a small proportion of the cereals, brown bread and graham crackers, milk, eggs and a little meat.

Sue—I am afraid papa was very angry when you asked for me, wasn't he, Jack, love? Jack—not at all. He asked me if I knew any more respectable young men who would be likely to marry your five sisters, if properly coaxed.

Chicago News: Judge Burke of Chicago had some difficulty with the material that was called for jury service in his court this morning.

The men did not grade high, and some of them returned strange answers to common questions, as, for example, one man who was asked what the term defendant meant said it meant "mind your own business." Another candidate for jury service declared that "defendant" referred to the lawyer.

"If you were taken as a juror," asked the court, addressing a third man "what would you expect to do?"

"Why, find the man guilty of course" was the ready answer. All three men were excused.

THE ADVANTAGES OF HOT AIR PUMPING ENGINES

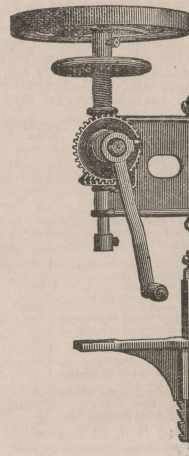
They Are Simple
Safe
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Require Little Labor
Little Heat
Little Fuel
Will Irrigate Crops
Water Stock
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Supply House
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ABUNDANCE OF WATER.

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"SCIENTIFIC" KIT OF TOOLS.

For Farmers, Stockmen, Planters and Mechanics--the Best in the World.



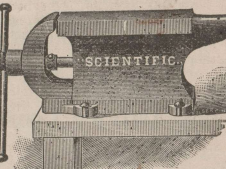
Farrier's Pincers, cast-steel, 12 inches.



Farrier's Knife, Wootenholm.

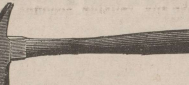


Screw Plate, 3 set dies, cut $\frac{1}{8}$, $\frac{1}{2}$ and $\frac{3}{8}$ inch.



Combination Anvil and Vise, hardened face finely polished; weighs 50 lbs.

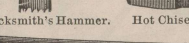
Our Vise is solid and strong. Face, $4\frac{1}{2} \times 9$ inches; jaws, 8 inches wide and open 4 inches. Our Drill is not a cheap Bench Drill, but a genuine Blacksmith's Post Drill, with adjustable table. Blacksmith's Drill Press, Hand Feed; weight, 50 pounds.



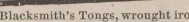
Adze-Eye Shoeing Hammer and Handle; weight, 9 ounces.



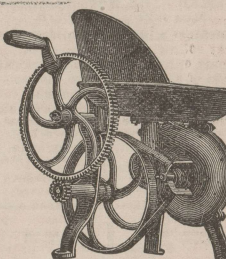
Blacksmith's Cold Chisel 1 $\frac{1}{2}$ lbs. Solid cast-steel.



Blacksmith's Hammer. Hot Chisel, 1 $\frac{1}{2}$ lb.



Blacksmith's Tongs, wrought iron, 18 in.



Farmer's Forge No. 5, B, will heat 1 $\frac{1}{2}$ inch iron. Our Forge is built especially for our kit, 15 inches high to top of bowl, 14 inches in diameter. Fan, 8 inches in diameter; weighs 45 lbs. Every tool in this list is the best the market affords, and so guaranteed. This kit of tools, freight prepaid to any R. R. depot in the U. S. as a premium for a club of 35 subscribers at \$1 each, or for \$25 cash.

TEXAS FARM AND RANCH, Dallas, Tex.

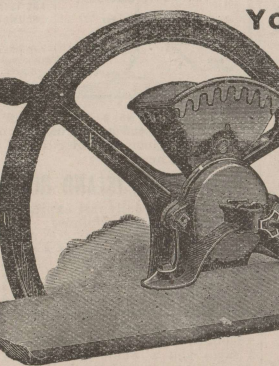
YOU CAN GRIND

Any kind of grain quickly and to your entire satisfaction with mills offered by TEXAS FARM AND RANCH.

YOUR OWN MILLER.

A Grinding-mill for Family Use.

Adjusted by one thumb-screw in a moment to grind from fine flour to hominy. Adapted for grinding corn, wheat, coffee, spices, or grain of any kind for domestic use or feeding purposes. Corn-meal, hominy and Graham flour produced fresh and pure in your own home. Grinds 1 pound of coffee in 1 minute; flour or meal a longer or shorter time, as the mill is set to grind fine or coarse. It has large, chilled-iron burrs, $4\frac{1}{2}$ inches in diameter, which are ground perfectly true. Steel shaft and fly-wheel 20 inches in diameter. Can be quickly fastened to the edge of a table or counter. The workmanship on the mill is first-class, all parts being made to duplicate.



We will furnish this mill and TEXAS FARM AND RANCH one year for \$5, receiver pays freight charges from Dallas, or we will give it for a club of seven new subscriptions to TEXAS FARM AND RANCH at one dollar each.

Address TEXAS FARM AND RANCH, Dallas, Texas.

Poultry.

My chickens are diseased with weakness of the legs. They seem healthy and all right until they are about four weeks old; then they stop growing, will not feather, seem to have a ravenous appetite, and finally die, after three or four weeks illness. I have examined them closely. They have no insects on them. I feed meal and cracked corn, and they have unlimited range in the woods. I have been told it was too much inbreeding. Have kept the same stock for three years. They are Langshans and Brown Leghorns. If you can tell me the cause and give me a remedy, you will oblige—ANNIE DOLLARHIDE, Summers' Mill, Texas.

[It may be too much inbreeding, but more likely it is too much free range. Chicks should be kept off the range until they are four to six weeks old. They get wet with dew, and leg-weary following the large fowls, and that is bad for them, at least, until they get full-feathered. Try feeding wheat, oats, sorghum seed, or millet, and less corn and corn meal].

A SUCCESSFUL TURKEY RAISER.

MRS. MITTIE B. JONES.

I have been an interested reader of your paper for some time, and have often wanted to recommend something in the poultry department, as I am somewhat of a poultry crank.

My special forte is in raising turkeys, in which I have been quite successful for several years. Last year raised 95 nice ones. This season have 54 young ones, the oldest ones just beginning to throw out the red on neck and head, and they are so nice and healthy. Have never had a droopie one, though I have lost several by accident. My neighbors complain of having so much trouble raising them that many of them have quit trying. Mine give me no more trouble than chickens—hardly so much—as they are away from the house from early morning until sundown.

If there are any despondent sisters who would like advice as to caring for these pets, I shall be glad to help them through your poultry department, if they will take practical experience, plainly expressed, instead of flowery language, taken from the experience of some one else.

In answer to H. B. Geer's article, "Will Kerosene Kill Chickens?" I say no; not if properly used. Finding that some of my young chicks had lice, I put some kerosene in a cup, went to the yard, and catching each little chick, I dipped one finger into the kerosene and rubbed it on top of the head and down each side of the comb. The lice died, but the chicks did not.

As this is my first visit, I will not stay too long. You have no objection to ladies writing for the poultry department, have you?
Minerva, Texas.

AUTUMN HATCHED LEGHORNS.

H. B. GEER.

There is no breed of fowls more hardy than the Leghorn, and no breed matures earlier. We have known persons to hatch Leghorn pullets in January and February, have them to begin laying by the latter part of July, set their eggs, and raise what might be called the second crop in the same year, making the Leghorn a semi-annual in growth. We have known Brown Leghorns that were hatched the latter part of March to lay before the middle of July; even when less than four months old.

The autumn hatched Leghorn makes a good layer. In setting eggs for this purpose, of course those laid by matured hens are the best, and if the chickens are hatched along in July, August and September, they will begin laying in February and March, or even earlier, if pushed in their growth as they should be.

The fall hatched chicken should have plenty of range, it is true, but not range only, and neglect in feeding. Feed plenty of meat and rich food, such as boiled potatoes and egg-bread while the chickens are small. Give them a good start, and force their growth as much possible.

A Leghorn is a fast grower, and it is a short race from the time the pullet is hatched till she is laying. The larger breeds require eight to ten months in which to mature, and some of them even a year, but not so the Leghorn; for it is a very poorly bred Leghorn pullet that has not settled down to regular laying by the time she is six months old.

In localities where the mosquitoes are

bad in the autumn, and bite the young chickens, the little things can be protected by roosting them in a large coop with a wire screen front, or if the wire cannot be had, use a piece of ordinary mosquito bar.

The persons who have been unsuccessful from any cause with their spring chickens should try a few fall chickens, and not let the whole year go by without having made any addition to the family flock.

Nashville, Tenn.

OSTRICH FARMING IN AMERICA.



There are no countries more suitable for raising the ostrich than the Southern States of America. Up to the present time California has almost a monopoly of the business in the United States, although the original birds imported by Mr. Cawston in 1886 were not a success, as they never recovered from the effects of the long voyage of seventy days from South Africa, and laid very few eggs, and it has been only by continual care and attention that he now has nearly 300



native born ostriches on his farm at Norwalk in Los Angeles county, and is able to fill orders for birds of any age.

An ostrich has to be four years old before she begins to lay, and some of Mr. Cawston's birds have now started to hatch regularly year after year, and the naturalization of the South African ostrich in America may be considered complete and a success, as the young mature sooner and have finer feathers than at Cape Colony.

The two principal exports from South Africa are diamonds and ostrich feathers. About one-half of the latter, valued at \$3,000,000, are taken by the United States, and it is a well known fact that had times in America mean low prices in Cape Colony. An era of prosperity seems to have commenced all over the world, so we must now look for high prices for feathers and other articles of luxury.

There are now over 300,000 domesti-

cated ostriches in South Africa, and several thousand in North Africa and Egypt; so valuable is this industry considered that a prohibitory export duty of \$500 has been levied by the Cape government on every ostrich and \$25 on every egg. Of all live stock, ostriches are easiest and cheapest to keep. They only require the same amount of feed or pasture land as a sheep, and a very light fence will turn them. Should they break away they will stay around their old fields and can be soon driven in again. They increase rapidly; one pair at Norwalk had three nests last year, hatching eight chicks each time. There is an immediate cash sale for the feathers in any quantity in New York and San Francisco, which average about \$20 a bird for plumage every nine months. There are several farms at the Cape with 2000 birds on them. There should be, in a few years, similar farms in the Southern States of America. Two-year-old birds can be bought at Norwalk for about \$70 each, chicks at \$25 per pair. These latter have to be ordered in advance and a deposit paid. Thirty full grown birds can be shipped in one car. It would appear a most profitable investment for some Texan to start this industry in our State, as the demands for chicks would be very large.

Our cut is from a photograph taken at Norwalk.

LICE AND MITES, AND CHICKS.

MRS. R. W. HOLBERT.

I thought I would write and give you a few of my ideas about raising chickens. I have just read Uncle Snort's letter about chicken lice, snuff, and so on. I think snuff a good remedy for lice, but I don't believe in condemning and making fun of whitewash and other disinfectants, for, Uncle Snort, there is more than one kind of lice. There are the big gray lice that stay on the head. Use sweet oil on them; it is perfectly harmless if you just rub a little on the head and neck. And another smaller, red-looking louse, that runs all over the chick. I use snuff for them. And there are mites—mere little black specks, and they stay in the hen house, in the nests, and on the roosts, as well as on the chickens, and that is the kind that whitewash will kill.

Some one has said that poultry will do better on small runs, but allow me to say I don't think they will; at least I always had better luck when my chicks could run anywhere and everywhere. I never have any trouble raising chicks after they are two days old. I haven't lost a chicken this year after they were that age.

To have good strong, hardy chicks, you must have good strong and hardy eggs to begin with; then make your nest right. I think it should be on the ground in hot weather. Anyway, hens like low nests best.

I scoop out a shallow place, large enough for a sitting of eggs to lie on the bottom. I don't want them piled one on top of another. And then put about an inch thick of hay or straw in, and keep the laying hens away from her. A hen will sit anywhere you put her if she is tame, and all poultry should be so. A man or woman who has wild fowls have no business trying to raise them.

I feed my chicks corn meal and dough in the morning, and some kind of solid feed at night. Millet seed, cracked corn and wheat are all good. Clabber is also excellent. I don't stuff them with medicine, and they don't need any.

I don't believe in fooling away time with mongrel hens. I find that pure blood pays best, and I will take the Plymouth Rocks, either barred or white,

every time. At another time I will tell how I raise young turkeys.
Arcadia, Texas.

GUINEAS

American Grange Bulletin.

These should not be kept for market, as they rarely sell at a price that will pay for shipping them, although they are a good table fowl, and especially for any one that is fond of wild game. They are most profitable for eggs, as after they begin to lay in the spring will lay regularly, at a time when it is usually desirable to use a considerable number of hen eggs for hatching.

The eggs are smaller, but the shells are thicker and harder to break and the egg itself is richer in nutriment, in proportion to its size, so that in market they sell at the same price.

Guineas are very tender when small and require the very best of treatment until they get well started to growing. After they get well feathered they will take care of themselves better than any other poultry on the farm, and for this reason they will in a majority of cases be found profitable.

TOBACCO STINKING BREATH.

Not pleasant to always carry around, but it don't compare with the nerve-destrorying power that tobacco keeps at work night and day to make you weak and impotent. Dull eyes, loss of interest in sweet words and looks tell the story. Brace up—quit. No-To-Bac is a sure, quick cure. Guaranteed by Druggists everywhere. Book, titled "Don't Tobacco Spit or Smoke Your Life Away," free. Ad. Sterling Remedy Co., New York City or Chicago.

CHEAP SUMMER RATES TO COLORADO.

For teachers and others desiring a cheap rate to Denver and return, the Great Rock Island Route will sell tickets July 2nd, 3rd, 4th, 5th and 6th at greatly reduced prices. These rates are made on account of meeting of National Educational Association, and we would be pleased to quote figures to all who desire to attend this meeting, as well as others who desire to take an outing at Denver, Colorado Springs or Manitou. Address, J. C. McCABE, G. P. A., Fort Worth, Texas.

R. A. DAVIS, Merit, Texas.
Breeder of Light Brahmas, Buff Cochins, Black Langshans, S. Wyandottes, B. F. Rocks, White Crested Black Polish, Brown Leghorns, S. Hamburgs, B. B. Game Bantams. Satisfaction Guaranteed. Correspondence solicited.

EGGS FOR SALE. Black Langshan excellent. \$2 per doz.
H. J. MARTIN.
301 Main street, Dallas, Texas.

Black Breasted Red Game Bantams.
Chicks, \$1 pair. Eggs, \$1 for seven. Mention Texas Farm and Ranch.
RUTH DOWNARD, Franklin, Texas.

Eggs for Hatching
From all leading varieties of thoroughbred poultry. Fit Genes a specialty. Price list on application. Stamp if convenient. **E. F. CARMOLY,** Blooming Grove, Texas.

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 per sitting. Address **UNCLE SNORT,** Waxahatchie, Texas.

Elmwood Poultry Yard.
The largest Poultry Yard in Western Texas. Have won more first premiums at the Dallas State Fair than any other breeder in the State. Have eggs for hatching at \$2 for 13 from the following breeds: Silver Spangled Hamburgs, White and Brown Leghorns, White Minorcas, Plymouth Rocks and Langshans. **R. A. CORBETT,** Baird, Texas.

OSTRICHES
FOR SALE.

A few pairs of two-year-old birds, \$120 per pair f. o. b. cars Norwalk.
Nine months old, \$60 per pair f. o. b. cars Norwalk. Apply to

Norwalk Ostrich Farm,
NORWALK,
LOS ANGELES CO., CAL.
Nearly 200 birds of all ages on this farm.

P. H. BURNEY, WACO, TEXAS, Thoroughbred Fowls

S. C. Mr. Leghorns—Stock bred from birds bought of Jas. Forsythe, the noted N. Y. Leghorn man. Black Langshans—Birby & Smith strain. White Plymouth Rocks, Barred P. Rocks. Next season Light Brahmas and Indian Games. Eggs any time. Satisfaction guaranteed.

WOOD COUNTY SOLID.

YANTIS.

Crops in this section are good. There has been too much rain since May 25th. The ground has been too wet to work almost all the time since above date. The grass and weeds are getting a considerable hold, but despite this, the prospect for corn was never better. Oats are also good; cotton is looking well but somewhat curtailed in acreage. There is more corn and peas than has ever been planted in this county before. Farmers are waking to their interest and are studying farming as a business, and it is surprising how much of the necessities of life this county can produce. We are looking forward to the time when Wood will be one of the wealthiest counties in the State. With her great diversity of soil she can produce almost anything that can be produced in the State.

We have thousands of acres of rich bottom land well suited to cane, upland that is capable of producing one bale of cotton per acre, or forty bushels of corn. Fruit of all kinds do well, and vegetables of all kinds can be raised at a profit.

TEXAS FARM AND RANCH may expect a host of new subscribers from here before very long. We are coming to the front, and wide-awake farmers will read agricultural papers.

Yantis, Wood Co., Texas.

SPANISH ITCH.

W. G. Venable, Sr., of Sherman, Texas, writes thus to Home and Farm, about this troublesome disease.

I lived for thirty-seven years in Southwestern Texas, and a considerable part of my business was horse raising and almost every year I had more or less of that disease among my horses. I will now give you my cure for that disease, which never failed with me. Take one pint of coal oil, one tablespoonful of powdered sulphur and common salt each, mix well and apply with a brush or rag, and if necessary apply again in about ten days.

Some three or four years ago some man here in Texas (I can't now remember his name) requested the Courier-Journal to give him a prescription for the same disease, instead of sending it to the paper I wrote directly to him and requested him to write me what success he had. He failed to comply with my request. Some months after I saw in the same paper an article from him recommending this prescription and said he got it from a gentleman living in Sherman.

FERTILIZING VALUE OF WOOD ASHES.

New York Times.

The difference between the ashes of hard woods, and those of soft woods is in the quantity rather than the quality. The amount of fertilizing material is much the same in both cases, but the soft woods yield very much less in quantity. The value of the ashes consists mostly in the lime, which amounts to three-fourths of the whole plant food in the ashes. The potash varies from ten per cent down to three or four, while the phosphoric acid is from one to three per cent. The ashes made an excellent fertilizer for every crop grown, but, having no nitrogen in them, they need this to be supplied in some way. The best nitrogenous fertilizer for garden crops is nitrate of soda, which costs about three cents a pound. There is no garden crop but is helped by liberal fertilizing in addition to plenty of manure.

SELECTING A SIRE.

Wallace's Farm.

We have often noticed farmers who complain that their hogs are too fine in the bone, selecting a sire to remedy the difficulty. While they claim to want hogs that have plenty of bone, and even somewhat coarse, we find when they actually select at the breeder's pens or state fairs, their sense of beauty overcomes their preconceived opinion as to what they want, and they choose a neat, compact, fine boned, handsome hog. They claim that they want one thing and then choose quite another. We have sometimes thought that swine breeders are all natural artists, in whom the sense of beauty overrules all other senses. The breeder who is offering for sale what he knows will sell, naturally breeds to meet the farmer's artistic tastes, and the result is the sale of a hog that does not meet the requirements of the farmers.

We have never yet seen anything to admire in the coarse hog, for the reason that coarseness means late maturity, an

excess of offal, lack of symmetry, and other undesirable qualities. To select, however, for beauty alone, is not by any means a safe rule. A bone may be of medium size, and yet be very strong. It may be large and coarse, and yet weak. We would say, buy a hog with a medium sized bone from a breeder who knows how to use, and actually uses, plenty of bone-making material, then give the young pigs, until their frames are grown, food rich in bone-making material, with salt and ashes at will, and there will be no ground for complaint.

There is not the slightest danger of hogs running down and becoming weak in the bone if they are fed bone-making material and males are selected from breeders who know to feed properly.

BREEDING DOWN AND UP.

H. H. Maxham, in American Swineherd.

An old subscriber asks in last issue, "why is it harder to breed pigs up than down?" Any load goes easier down than up. When a boy we used to tug the sled up the hill, but it would go down itself and carry us, too. I think the man is more to blame for degeneration than the hog. Take some of our oldest breeders of all the breeds and their hogs do not degenerate. I might enumerate a few of the potent causes for degeneracy. A young breeder will buy a fine gilt, breed her at six months of age, not feed her more than half enough, fearing she will become too fat. At the age of five weeks he will wean her pigs and breed her again to get another litter, to make money fast. By the time the second litter is raised the sow is deformed, her back gone and pot-bellied, with her pigs mostly runts. Another, a wealthy farmer neighbor, bought an extra boar pig, at the State Fair, at seven months of age, turned him into forty sows with results that can be readily conceived. These are a few of the causes. "Eternal vigilance is the price of success" in breeding good pigs as well as other business.

The wool growers of the Devil's River County are said to be holding a large amount of wool for a change in prices. We hope they will win, but it is a hazardous venture.

Silberman Bros., wool commission merchants, Chicago, in their wool circular and price current for June 11th, notes a slight improvement in prices, and advise immediate shipments. The following are the quotations for Texas:

SPRING.	
Fine (heavy).....	7c to 8 1/2c
Fine (fair).....	8c to 10 c
Fine (very choice).....	9c to 10 c
Fine medium.....	10c to 12 c
Medium.....	12c to 14 c
Low medium.....	12c to 14 c
Original largely improved.....	12c to 10 c
FALL.	
Heavy fine.....	7c to 8c
Fine average.....	8c to 10c
Fine medium.....	10c to 11c
Original packages average wools.....	7c to 10c

Mexico produces anything that can be raised in any country, asserts the Atlanta Constitution. So varied is climate that in the same state can be raised any product of the tropics, and of the polar regions. Cotton, wheat, rye, silver, silk, coconuts, bananas, rice, cocoa, vanilla, logwood, mahogany, hides and wine are the principal products.

"What a great pity," said the sportsman who wanted to take his catch home, "that our fish are not more like our office boys." "I don't quite see the connection," replied his friend. "Then the longer you kept them the fresher they'd get."—Indianapolis Journal.

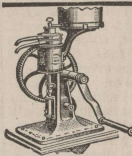
Irritated Frenchman (to American who has taken him for a waiter)—Sir, you have gr-r-ossly insulted me. There is my card. My seconds will wait upon you, sir-r. American—Never mind your seconds, Frenchy. You can wait upon me just as well. Pass, me the sauce, and be quick about it.—English Paper.

Money in

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

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

HAVE YOU FIVE OR MORE COWS?



If so a "Baby" Cream Separator will earn its cost for you every year. Why continue an inferior system another year at so great a loss? Dairying is now the only profitable feature of Agriculture. Properly conducted it always pays well, and must pay you. You need a Separator, and you need the BEST—the "Baby." All styles and capacities. Prices, \$75 upward. Send for new 1895 Catalogue.

THE DE LAVAL SEPARATOR CO.,

Branch Offices:
ELGIN, ILL.General Offices:
74 CORTLANDT ST., NEW YORK.

WOOL

YOUR WOOL is not our WOOL. But your INTEREST is our INTEREST when you ship us your wool, and when any firm makes their interest their interest they will succeed as we have done in the wool business. Our Success has electrified the wool houses in this market. Our PROMPT SALES AND QUICK RETURNS have astonished and pleased our shippers. We have fully demonstrated that it is not necessary to wait three to six months before making returns for wool. We frequently make returns in that many days. Don't dispose of your wool until you write for our Wool Report and see our prices and the testimonials of our shippers. Let us hear from you. REFERENCE: Metropolitan National Bank, Chicago, and this paper.

SUMMERS, MORRISON & CO. 174 SOUTH WATER STREET,
COMMISSION MERCHANTS, CHICAGO, ILL.

WOOL

ESTABLISHED
1866

Receive Consignments direct from the sheep owner. Sell direct to the Manufacturer. Always get Highest Market Price. Charge less commission. Report sales promptly and fully. Have been engaged in a successful wool business for 29 years. Are reliable—Ask Chicago Banks or Mercantile Agencies. Make advances when desired. Furnish sacks free to shippers. Have hundreds of Testimonials from our customers. Would like to send you "Wool Letter." Write for it.

SILBERMAN BROS., 208-14 Michigan St., CHICAGO, ILL.

FORT WORTH STOCK YARDS CO.

♦♦♦ COMPETITION IS THE LIFE OF TRADE. ♦♦♦

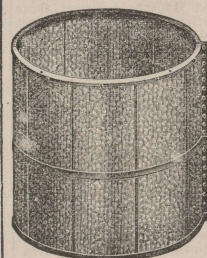
Competitive hog buyers located on this market, who will buy Light, Heavy and Stock Hogs constantly. Prices paid that will not admit of shipping elsewhere. Competitive cattle buyers on this market who will buy all the Fat Cows, Feeders, Light Steers and Canner Cattle offered at Satisfactory Prices.

SHIP YOUR HOGS AND CATTLE TO YOUR HOME MARKET.

Write for Market Information.

G. W. SIMPSON, President.

W. E. REINER, General Manager.



THE BEST IS SURE TO WIN

GALVANIZED STEEL TANKS.

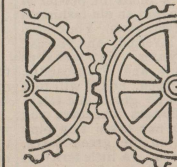
All Sizes and for all Purposes.

Shipped ready for use, or knocked down to save freight. Very easy to set up. We have practical, durable tanks. Just what you want.

AMERICAN STEEL TANK CO., MISHAWAKA, IND.

Made To Fit

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—are our Engines, Boilers, Machinery, Pumps, Cotton Gin Outfits, Steam Cotton Presses, Pumps and Injectors, Wrought Iron Pipe, Rubber and Leather Belting, Electric Motors, Ventilating Fans and Electric description. Write

HUNTER & BOOSO, 172 Elm St., F

Household.

Address all letters for this Department to Mrs. S. E. Buchanan, Dallas, Texas.

LET US FORGET.

ADA THOMAS.

When our hopes scattered lie,
And our bleeding hearts cry,
Let us forget;
The clouds rift aside,
That new glories hide,
If we forget.

If hard pressed in the strife
Of the journey of life,
Let us forget;
There's a path straight and true,
Only traveled by few,
But we forget.

If we're wounded sore
By a loved one, once more,
Let us forget;
It was not without cause
We are not without flaws—
Ah, we forget!

In a wee little while
The Heavens will smile—
Let us forget;
And the troubles of earth—
That are little worth,
We shall forget.

—St. Elmo, Texas.

CHAT

Mrs. Fisher is enthused upon the subject of building a monument to our great chieftain, Jefferson Davis. We sincerely hope that the daughters of the South will catch her enthusiasm and go forward with a zeal and energy without a parallel in the grand work. Surely no heart among our women but beats faster and swells with love and pride when his great name is mentioned. How we should have enjoyed the re-union in Houston. There were many from the red old hills of Georgia, the sight of whom would have gladdened our eyes and heart. What a grand event was the unveiling of that Confederate monument at Chicago. How time has softened and hallowed the past when those who buried our soldiers as prisoners of war, now do homage to their valor and bravery by helping to raise above their valiant dust a monument to commemorate their glory.

Mrs. Gertrude Barnes Standlee has our thanks for a description for pretty center-piece for the table. We agree with her as to the zest given a meal through pretty and delicate accessories for the table. Will some sister who has violets to spare divide with Mrs. Standlee? We will be pleased to hear from you again, Mrs. Standlee.

Mrs. J. B. Gay puts in a plea for the babies and the little ones, which is timely, in view of the warm season which is upon us, and that it is the vacation season also, when the little ones are loosed from the occupation and the restrictions of the school room, and they will need the thoughtful, patient help of the mothers to pass their leisure days in pleasant and useful pastime. So much can be taught them in the way time hangs upon their little idle hands, and how much most of them enjoy being helpful, especially when they are rewarded by smiles, and the just need of praise. How often we hear a really loving and tender mother say, "children are a perfect nuisance, more hinder than help." It is sometimes rather a hindrance to have their help, when mother is worried, but their anxiety to help is the result of their love for her, and a sincere desire to be helpful. Mrs. Gay's suggestions upon dress for the infant are also excellent, and we would add one more; it is when baby is in your lap, do not lay your heavy hot hand on its stomach. We have so often seen this done; it must be exceedingly uncomfortable, especially when the little one has just nursed. There are many things which seem trifling, yet they are anything less than trifles to the baby who cannot speak to tell its discomforts.

Mrs. Ada Thomas, to whom we extend a cordial hand-shake, prefaces her tender little poem with these kind words: "TEXAS FARM AND RANCH finds its welcome way to our new Texas home, in this little suburb of Austin, every week, and finds me always ready to pounce upon the Household page. When I read 'When I Get Time,' I wondered if any of mine are worthy of a place in that corner, and I have written this little thing especially for the Household." We are more than pleased to give you place in our circle, dear madam, and I hope to have you come again.

Leo Jewell's comparison of Tribly and The Heavenly Twins is excellent, and points out very clearly the good or bad influence which is the result of different styles of fiction. We have not

read Tribly, nor have we read the Heavenly Twins, consequently we cannot express our opinion upon either, but we sincerely hope that Tribly is a myth, whose example will find few followers. This seems a vain hope, since there are Tribly parties, Tribly fans, ties, shoes and jewelry, and almost everything else you can imagine. The only representation of the Tribly craze which has come under our personal observation, we will rehearse for the benefit of the Household. In the pageant which illustrated the programme of the Charity Circus, lately held in Dallas, among other amusing caricatures, there was an immense cage on a float in which there was "posed" a great black negro man draped to represent Tribly. His immense feet were clad only in socks, his scant and sleeveless drapery, snowy white. You can better imagine than we can tell the ludicrous sight. This is our sole acquaintance with Tribly.

Hattie Harmon, your plea for the comfort of children is well timed. Poor little things! A few evenings since we attended a church social where there were a large number of children. All with their hair curled and crimped and flowing like a veil around their shoulders, looking as you say, hot and unidy. Those ranging in years from eight to twelve, were seemingly very proud of their wavy crimps, and occupied the time which should have been spent in childish pleasures, primping their unnatural curls. The children of the present day know really little of childhood's comfort in plain clothes and childish styles. They are almost all of them very fashionable little misses, burdened with the care of finery. It is a struggle against nature, cultivating their vanity and love of costly raiment.

Since our last issue we have had very sad news: Our beloved Stella has died. The circumstances attending her death we have not heard. Nellie Jones wrote but a short letter, announcing the fact of her death on May the third, at her home in Chicago. She received a letter from a sister of Stella's. We have written asking this sister to write us a sketch of her life. Stella was but a non-deplume. She was Miss Sarah J. Harvey, of Chicago, the comfort and stay of an aged and infirm father, who finds life very dark without the sunlight of her love and care—a fond and helpful sister, and the beloved aunt of a baby of boys, who looked to her for counsel and guidance. Among the Household she was indeed a bright particular star, whose contributions were always welcome, helpful and affectionate. To the editor she wrote many personal letters all in the interest of the Household, ever planning and suggesting some improvement. We shall miss her; her large heart was full to overflowing with the love of humanity, and the desire to do good. Let us emulate her example, and strive to do all we can in the time that is left us to work. May a loving Father comfort and cheer the bereaved loved ones.

A PRETTY CENTER-PIECE FOR THE TABLE.

MRS. W. J. STANDLEE.

Dear Mrs. Buchanan: I wonder if among all the Household sisters some one who has them to spare would send me sweet violet roots, or the roots of the sweet garden mint (not peppermint). Will return postage; and if liked, would in the fall, send canna roots, seeds of climbers, or ipomopsis. Violets are my favorite flower, and am very anxious to get them started, so I will have the dainty blossoms this fall. Now they have finished blooming is the time for thinning them. Will not one of you sisters who have more than you know what to do with remember me?

I want to tell the sisters how to make a pretty center-piece for the table. I think that the food tastes so much nicer if you have flowers on, or even leaves. But one is often too busy to go and gather flowers at meal times. Here is one way to have something pretty and green all the time. I wanted something not easily knocked over. Take the bottom of a glass lamp that has had the bowl broken off, fasten it into a block of plaster of paris, (I put mine into an old fashioned glass salt cellar of cut glass. Your lamp standard is now inverted, and you can fill the stem with water. Now take slips of Wandering Jew and Scandasia, green, red, and striped, and it will root readily and always be green and fresh. Add one or two flowers whenever you have them. Mine has three tiny pink buds resting on the green leaves, and looks like a poem. A little fern root with the delicate green fronds standing erect is very pretty among the little vines.

I had one that froze last Xmas week, and the little vines were a foot long. Keep them pinched back to make them bushy. It is this advantage over a bouquet, it is always arranged gracefully—Nature never makes a mistake. Is much lighter and daintier than a pot, and is no trouble whatever, only requiring a little fresh water, and once in a while a little sunshine. Try it, and see if you are not pleased.

So much has been said about books that I will not take up space only to say, I too, enjoy reading. With best wishes for the Household.

Salado, Texas. Box 23.

MONUMENTS FOR OUR DEAD LEADERS.

MRS. AGNES FISHER.

Dear Household Band: What interesting meetings we are having; and I want to tell you all how much I enjoy your nice letters. They are such a help and comfort to me.

Dear Mrs. Buchanan, how busy you must be. You must have a world of patience to go through all of our letters and correct mistakes. How many of us realize how burdensome your task is, and how we should appreciate our noble leader. Well, the great re-union, is over at last, and I hope many of you were able to attend. I did not. What a gathering of old comrades! I should so liked to have seen them. How my heart ached when I read in the news the roll-call of our brave Second Texas. How many failed to respond. Only echo answered, "I am on the golden shore." Many names I remember of old friends who never came home. I was only sixteen years of age when the battle of Shiloh was fought, and "the Second Texas was out to pieces," was the news that came home. It was an awful time. One noble mother sent her two sons with Second Texas. One now lies on Shiloh hill, the other came home a cripple for life; while a rich neighbor's son, who was able to buy a substitute, remained at home. How well I remember how we girls would snub this same young man; and they finally moved from the neighborhood. Many can recall just such brave young men, and I think a few of such. Dear sisters of our Southland, the time has at last come when we can do something for our brave, loved ones, many of whom are now nearing life's journey's end. It was a noble plan suggested by General Moran; let us be up and doing. It will soon be time for our annual re-unions, and as we are now stationed in named camps in different counties, it will be an easy task to organize. Let our chieftain's monument go up at once—not wait two years for it to be built. We want it raised as soon as it can be done, so all our soldier boys who wore the gray may be able to be at the unveiling of the same. It would be a proud day for them and a happy one for us, to know we aided in this noble work. There are so many women who are not over-burdened with household cares, and who would be only too glad to serve the lost cause in this way. Let our women organize at Fourth of July celebrations and re-unions, and get all we can for this purpose. There is not one woman in this whole Southland who would not gladly do without some article, if need be, in order to have a dollar saved for the Jeff Davis monument, or Col. Rogers monument, of Second Texas regiment.

Sisters, did you ever wear a Jeff Davis hat? How well I remember how we girls made our hats out of palmetto, grown on the San Jacinto river. The palmetto was cut and bleached nice and white, and then stripped into small strips the size of oat straws. We plaited them in a scolloped plait, which was very pretty, and sewed them in shape of the hats bought, trimmed them nicely, and our winter hats we dyed black or brown with red oak bark dye, set with copperas. These were our Davis hats, and prouder girls it would be hard to find than we were in 1863.

Hope that you will organize as the Daughters of the Confederacy, and do all you can for our cause, and that success may crown your efforts.

Bremond, Texas.

A PLEA FOR OUR BABIES.

MRS. J. B. GAY.

Since that so important subject, How to Care for the Little Ones, is under discussion, at least in May 25th issue, I will keep it again.

It is first the right of every child to be well born, then the second consideration is to protect him—his body and mind. The dressing the little things generally get is both heavy and cumbersome. The gathers, and plaits, and

tucks wasted on their little garments is not only a waste of time and material, but adds greatly to the discomfort of mother and babe. It seems to me that little dresses of the simplest make, no more than thirty or thirty-two inches (this well covers their feet), in length, and little flannels made, not with a belt and lot of gathers, but like you would the night dress; just a plain little long-sleeved slip, and his undershirts the same way, only low necked and sleeveless, would be dress enough for any baby. Nor do we want so very many of these, for if they are healthy, as they should be, they outgrow their clothes so fast. From the time a child shows any sign of knowing anything, it should be taught obedience. Let it understand that it must obey, for the welfare of itself and others:

"Issue but few commands—
So few thy child can learn them in a day.
Let them with conflicting maxims force
Them rigidly, but in the gentlest way.
Thy three year-old the parents' drilling sees;
No child a trifling parent will obey."

How well written are these lines of Mrs. Purdy's!

Like Mrs. Buchanan, I think we should be as careful and particular in selecting the company for our children to keep as we should be in selecting their literature.

In the words of Ruskin we will say, "All evil springs from unused good." The child is made of good, but is easily led to do evil. If it starts for the bureau with its tiny hammer and tacks, pray do not abuse or shake him to mar the beauty of his soul—ambition; for he saw no wrong in it. Was only thinking of his tacks, and not the bureau. Give him a few pieces of soft pine, and show him how to tack them together to make a box, table, or anything else, and when he has made it and brings it for you to see how nice it is done, praise him, furnish him with pencil and paper, and he will not mark up your walls and doors, drawing his cows and roses. Learn to appreciate fully his most imperfect efforts. By treating him this way, you not only give him an occupation that he delights in, but you teach him to be constructive instead of destructive. You teach him independence, and a love for good instead of evil. Children love kind words of approval, and will strive to win them if you start them right.

Treat your dear little girls as gently. If they want to cut up your clothes or the garment you are sewing on with the scissors you have just laid aside, tell them it would be so much nicer to cut paper than to make mamma's dress look ugly. Give them plenty of papers (in colors if you can) and show them how to cut paper dolls, etc., or give them an old-fashioned catalogue, and they will cut out the pictures; then some kind of an old book and a little paste, so they may make a picture book, one which they will love all the more for their own making. Or you may give them bits of cloth, teach them to cut and sew their doll dresses. All this delights them, and you will not find them so hard to keep indoors on rainy days.

Do not say you haven't the time for this, for if you haven't (the time to properly train your children), you surely made a mistake in becoming a mother. It really saves instead of wastes time. Give the little ones an out-of-the-way corner of your room for their own. You can teach them neatness by teaching them to keep their things to themselves and in order. If they can read get papa or big brother to make them some kind of a little box, with shelves, and put it on legs for their own book case and they will feel a pride in keeping their books you have carefully selected for them in it.

Give them scraps, scissors, needles and thread, paper, etc. The boys, wood material, hammer, tacks, a tiny saw and such like, but both pencil and paper, and you will find they will be more contented at home, and will not want to live in the streets, or with those little destructive, less fortunate children so often seen.

Give them some kind of a little wagon, and they will delight in bringing in the chips for mamma, and helping her in various ways. Praise them for their good works, and they will love good. Allow them to play in the sand and on the grass without having a fear of soiling their clothes. They shouldn't be too fine to be soiled. You can teach them neatness without this. If you send them to school, or somewhere, with a "Go on, to get out of my way," mark me, they will not soon forget it, and will want to go again, to get out of your way.

In conclusion, I want to speak a word

About Bees.

HENS AND HONEY.

C. M. WALLACE.

For some time past I have been trying to think of some plan of stopping raising all cotton for a living, and I have been reading carefully all articles in TEXAS FARM AND RANCH about bees and poultry, and have all the articles stowed away in my cracker box for future reference, for I have concluded to adopt hens and honey for a partial redemption from the all cotton plan. Now I want to ask what is a super? Is it a box with frames in, without top or bottom?

2. I have just been reading an article by Emerson T. Abbott, of St. Joseph, Mo., mentioning a bee escape. What is it? How used? It must be very useful, I judge by the way he speaks of it.

3. Would a partially shaded place be better for the bee stands to protect them from excessive heat? The reason for this question is, a neighbor of mine told me he lost a lot of honey by the sun melting the wax and the whole fell to the bottom of the hive, and the honey ran out on the ground. His stands are unprotected.

4. Are hives better on a low platform so as to protect them from ants, or are they better off on the ground? Do bees gather honey from corn tassels and sorghum heads, or only pollen? What is the best wood to make the hives of, and should they be made air tight?

As you will see by above questions I am plenty verdant as to bees, so far as experience goes, but by patience and perseverance, and TEXAS FARM AND RANCH, I mean to succeed or bust a suspender.

If you indulge me this time I may ask some more questions after-awhile. Runge, Texas.

[Will some of our numerous readers who "know bees" answer Mr. Wallace's queries?—Ed.]

UNCLE SAM'S WEALTH.

Mulhall, the English Statistician, Commends American Energy.

New York, May 29.—The English statistician, Michael G. Mulhall, publishes in the June number of the North American Review an article on "The Power and Wealth of the United States." Mr. Mulhall's conclusion is that "if we take a survey of mankind in ancient or modern times, as regards the physical, mechanical and intellectual force of nations we find nothing to compare with the United States in this present year of 1895 and that the United States possesses by far the greatest productive power in the world." He asserts that the United States possesses almost as much energy as Great Britain, Germany and France collected, and that the ratio falling to each American is more than what two Englishmen or Germans have at their disposal. He points out by a careful comparison between the conditions in these different countries that an ordinary farm hand in the United States raises as much grain as three in England, four in France, five in Germany, or six in Austria. One man in America can produce as much flour as will feed 350, whereas in Europe one man feeds only thirty persons. Mr. Mulhall calls special attention to the fact that the intellectual power of the government of the republic is in harmony with the industrial and mechanical, 87 per cent of the population over 10 years of age being able to read and write.

"It may be fearlessly asserted that in the history of the human race no nation ever before possessed 40,000,000 instructed citizens."

The writer sets forth in regard to the growth of the wealth of the United States that the average annual increment from 1821 to 1890 was \$901,000,000, which sum is \$1,000,000 over the total wealth of Great Britain.

Classifying the whole wealth of the Union under two heads of urban and rural, Mr. Mulhall finds that rural or agricultural wealth has only quadrupled in forty years, while urban wealth has multiplied sixteen-fold. In the important series of figures, it is shown that the rise in wealth and the increase in wages came almost hand in hand.

A GOOD INVESTMENT.

The Ohio Farmer says: Land at present prices is the best investment that can be made. It is just as good an investment to keep it as to buy it. It is down to bed-rock and cannot go lower. Any movement must be upward. Land

is worth more even than it will bring in the market. This is the general rule, and there are very few exceptions. The causes are of a financial character, rather than industrial, and are temporary, as we verily believe.

No other legitimate business, outside of a speculative character, is more profitable than farming at the present time, all things considered. There are certain monopolies, franchises, official and professional positions, etc., that pay better, but you have not the command of any of these. Manufacturers of all kinds are making little profit. Merchants are content to keep even. Labor is glad of employment at living wages. With the capital you have invested, you cannot do better than to keep it in the farm.

Have faith in the future. Have faith in the land. Stick to it. It will not disappoint you in the long run. If bad laws are in the way, they will be repealed, provided you help compel their repeal. The good common sense of the American people will right all political wrongs. Our resources are almost unlimited, our recuperative powers unsurpassed. The world must have our products. Conditions are rapidly changing. Population is now increasing faster than farm areas, and demand is rapidly overtaking supply. Though we freely admit that the present is dark, yet the future is bright for the level headed American farmer. He may not get rich, but he will be prosperous; he can have plenty and peace. The ambition to be rich has ruined thousands, and the possession of riches thousands more. It is an unholly ambition, and its realization is too often accomplished by the surrender of every element of true happiness. Be content with a competence, with plenty, with a virtuous life, a happy home, a loving wife, and children who will honor their parents.

Western Agriculturist: It is important to remember that the digestive apparatus of a horse is the exact opposite of that of a cow. The stomach of a horse is a single bag and a very small one. It is too little to contain even an ordinary feed of oats. By the time that two-thirds of it has been swallowed, as much is passing out of the stomach as is being eaten. In consequence of this a very large proportion of a horse's food is not digested in the stomach, but is shoved along into the bowels. The horse in a state of nature is an animal that is almost always feeding. He can not, like the cow or ox, pack away a large quantity of food and then lie down and chew it thoroughly, nor indeed at all.

One—You haven't a single reason why you won't join our club. "Tother—Perhaps not, but I have a married reason.—Detroit Free Press.

"Money talks," said the confident man. "Yes," replied the melancholy citizen. "But when its conversing with a poor relation it usually talks in a whisper."—Washington Star.

IN 10 ANNUAL PAYMENTS.

Only 7 Per Cent Annual Interest 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 County, Texas.

HAVE YOU ANY CORN?

No man who raises corn can afford to shell it by hand. Time and outlay are both too valuable to be wasted when there are so many ways of saving both. There is no more profitable thing for a man to own than a Black Hawk Corn Sheller. It is thoroughly made of the best material, can not get out of order, and is so simple and easily handled that a child of six years can run it as thoroughly as a man, and with just as good results.

We consider this one of the most valuable machines we can possibly secure for farmers, and as the cost is but \$3, no one can afford to be without it, especially when it is sent for \$3.25 with TEXAS FARM AND RANCH one year.

Your little boy can take a bushel of selected corn, shell it, drop it into our Famous Family Mill, and grind it into meal in a little while.

We will send you circulars fully describing these machines on application. Address TEXAS FARM AND RANCH, Dallas, Texas.



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healthy—grow happy—grow rosy checked and bright eyed, on HIRE'S ROOTBEER. This great health-giving temperance drink should be kept in every home. It will benefit and delight every member of the family from the baby up, and prove a most delicious thirst satisfying beverage for callers. It's good all the time—morning, noon and night. Get the genuine

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A 25 cent package makes 9 gallons. Sold everywhere. The Chas. E. Hires Co., Philadelphia.

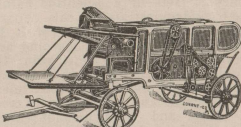
For Italian bees, queens and full colonies, or honey, address J. N. COLWICK, Norse, Texas.

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Succ. to W. R. Graham Mfg. Co. Manufacturers of Bee Hives and dealers in all kinds of apian supplies. Our hives are all made on the dove-tail plan. The largest and only well equipped factory in the South. Write for illustrated catalogue and price list. BOYD & CREASY, Proprietors, Greenville, Texas.

I WILL GIVE \$5 to any person who will let me know where the estate of Jacob Hill (or Peter Hill) is located. R. SAWOEL, Auburn, Ind.

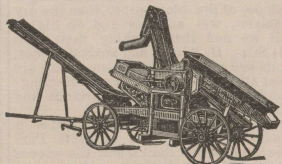
THE FARQUHAR SEPARATOR.



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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 the

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,
1,848,338 bales of cotton,
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34,595,169 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

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BETWEEN
Galveston and St. Louis

THE TEXAS A. & M. COLLEGE—COMMENCEMENT, 1895.

DALLAS, TEXAS.

Editor Texas Farm and Ranch.

To persons not directly interested there is nothing more monotonous than the regulation college commencement—the orations replete with winged rhetoric and embarrassing ellipses; the Society debates heavy, with stately logic, bristling with salient points like a Chinese fortification, and as easily overcome, with gestures and genuflections carefully studied before a mirror, or a classmate, and as full of grace and expression as the antics of St. Vitus' dance; the elongated theses, which, to the authors are the combined wisdom of the ages, but to the auditor seem as dry as the sands of the Sahara and as long as a Kansas drouth. At the Texas A. & M. College we have all these scholastic fruits fully ripe, but we have something to vary what might otherwise be monotonous to those who neither participate nor are represented in the exercises. Here something else is taught besides philosophy and foot ball, belles-lettres and boating. The pupils are trained to some extent in the things that pertain to the life that is—things they may possibly find it convenient to do in after life, or whether they do or not, they are things that must be done by somebody, and for everybody, and consequently these things interest everybody. It would not extinguish the race if there never was another essay on the relation of nothing to infinity, or another bacchanalian sermon preached. But we had as well be exterminated as to have no machinery for the world goes on wheels these days; and as in this latitude the blackberry crop does not make close connection with persimmons and acorns, nor the latter with the dewberries of March, it is absolutely necessary that we have cultivated crops or learn to hibernate for half the year. These needs of the race call for mechanical engineers, civil engineers, farmers and fruit growers—men who can construct a cantilever bridge and railway rolling stock to pass over it, build a house or a church; make a steam engine or a base ball bat; men who can tunnel a mountain and build a railway, who can construct and operate an electric plant, an ice factory, a steam laundry, or a system of waterworks; or who can breed after correct principles domestic animals, produce and preserve the forage for their sustenance, and diagnose and cure their diseases; who know the difference between a Canada thistle and a Triumph potato, between a honey bee and a Mexican cotton boll weevil; who know how to propagate, cultivate and harvest the innumerable products of the field, the forest and the orchard which the present condition of man require. These things have an interest for us all, and serve to tone down the monotony of the more arid exercises which we must take with the rest. However, to the enlightened citizen who is hopeful for the future of his country, and realizes that these "green youngsters" will soon be ripe enough to take the places of those who now operate mundane affairs, every part of the exercises possesses an interest—however they may savor of the bread and butter period of life. This much by way of prelude, and I will try to give the reader who was not there and those who have never been there some idea of what the College is, and what it is doing, based not alone upon the revelations of the Annual Commencement of 1895, but upon the experience gained from a full course of instruction there.

THE COLLEGE.

The object of this College, as stated in the act of Congress of July, 1862, is to excite and foster in the minds of the people a proper appreciation of the importance and attractiveness of those pursuits by which the material development of the country is advanced. From this category we exclude the so called learned professions, for the reason that they produce nothing and add nothing to the wealth of the country, nor to the prosperity of the people outside of their own ranks. I would not disparage them, for in the economy of the age they doubtless have a place and the place is always full to overflowing.

COURSES.

The course of study is divided into two main branches—Agricultural and Mechanical—and these are divided into several sub-divisions. In the Agricultural course two degrees are conferred, the B. S. A. and the B. S. H., and in the Mechanical the B. M. E. and B. O. E. The Agricultural Department, under

the direction of Prof. J. H. Connell, is thoroughly equipped in every detail. Every improved implement for preparing the soil, planting, cultivating and harvesting the crops, is to be found in the implement barn. Several hundred acres of land are in cultivation and a great variety of products being planted, all being worked largely by the students under the careful supervision of the Director and his assistants, Prof. Soule, Clayton, and Carson. The creamery and cheese factory is also operated mainly by the students, and the products are used by the College.

The Mechanical Department is under the direction of Prof. R. H. Whitlock, assisted by Prof. Brae and Mr. Lewis. In this department we find, first, the carpenter shop where the boys begin by planing and sawing square blocks, making crosses, mortises and tenons, dove-tails, etc., on, step by step, until they are fully able to work by plans and specifications. The wood turning department is one step higher, and the students' work on exhibition shows careful training and wonderful skill. From this they go to the blacksmith shop, where they learn to forge iron into any desired shape, weld, and make horse shoes, etc. Then they go to the machine shop where they are required not only to do the work, but to draw plans for dynamos, steam engines, and other machines, and make miniature designs of each. Several classes have constructed complete engines, one of which was used at the College for several years.

The Horticultural Department contains a laboratory and library, where vegetables, fruits and flowers are studied by the students—not only the theory, but the practice, for they have regular field practice as well as study. This department is doing a great work for Texas in studying the diseases of plants and fruits and remedies for same. Many important facts of a scientific nature have been demonstrated in this department under the direction of Prof. R. H. Price, a horticulturist of learning and experience, and Prof. Ness, who has enough enthusiasm for two. There are large orchards under this department also vineyards and gardens, with trees and plants and vines, most of which, like those of the first garden of which we have any reliable account, produce fruit, each after its kind. But some, from causes unnecessary to mention, do not.

The Chemical Department is equipped with one of the finest laboratories in the South. Each student spends two years here, working five hours per week. The training is thorough and scientific and is directed by one of the most thoroughly competent chemists in the country, Prof. H. H. Harrington, whose work commands respect wherever known. The students are first taught the use of the blow pipe, then the dry analysis, wet analysis and on higher till we find them making their own H_2SO_4 , H_2S etc., and analyzing ores, soils and manures, and these results are sent all over the state. Prof. Harrington is assisted by Profs. Adriance and Tilson.

The Department of Mathematics is under the supervision of Profs. Puryear, Smith and Banks, and the science is taught in a thorough and practical way from the simplest theorems to "infernal calculus."

The Veterinary Department, presided over by Dr. M. Francis, is supplied with all the veterinary implements and drugs and rare scientific curios which aid in the teaching of said branch. Dr. Francis is thoroughly competent and has the confidence of his class, some of whom say he can take an animal to pieces and put him together again as good as before. Every farmer and stock raiser should watch the results of Dr. Francis' experiments as reported in his bulletins, as they are full of data useful to the wide awake stock raiser.

Prof. J. C. Nagle, assisted by Prof. Spence, has charge of the Department of Civil Engineering and Physics. Everything necessary to the section room and field practice will be found in the instrument room. The students here learn the relative strengths of different kinds of woods, iron, stone and brick, and design bridges and other structures, working by strictly scientific rules. The field practice is very thorough, including topographical surveys, plans for drainage, sewers, railways and other works. Prof. Nagle takes especial pains to turn out good C. E.'s. Many of his graduates are now filling important positions.

The Department of English gives thorough teaching in the elementary

branches of literature. This Department is under the supervision of Prof's. Hutson, Philpott and Banks, all of whom make this calling their life work. Rev. T. C. Bittle, Professor of Languages, teaches Latin, Spanish, Greek and French, one of which is required in all branches except the Agricultural.

The Department of Drawing is directed by Prof. Giesecke, where free-hand, perspective, and mechanical drawing are carefully taught.

The Department of Military Science is under charge of Lt. George Bartlett, U. S. A., who has proven himself to be a true exponent of military tactics and an excellent disciplinarian. He has charge of the discipline of the school while the commissioned officers of the corps of cadets have the students under immediate control. Under Lt. Bartlett the battalion was in perfect order at Commencement, and the companies worked like a machine, and not as a body of separate individuals. Discipline of this kind is conducive to patriotism, manliness, punctuality and alertness. This responsibility resting on the shoulders of the senior class, necessarily causes them to take pride in performing their duties.

These departments deal with the mental and physical features of the school. Much of the work is calculated to sharpen the appetite and requires adequate means of recouping used-up energy. The task of feeding more than three hundred hungry young men, whose duties consist of trying mental and physical exertion, is not a small one. Prof. Shiss is purveyor of the department of subsistence, and grand commander of mess hall. He not only feeds the students, but furnishes supplies to the faculty and employees of every grade. His business aggregates a value of many thousands of dollars annually. He is the right man for the place.

Especial credit is due to Major Cavitt, the resident member, and Secretary of the Board of Directors. He has always taken a deep interest in the College, and much of the work of the board devolves upon him.

But the man above all, to whom the College is indebted for its efficiency and popularity, is the honored President, Gen. L. S. Ross, whom, through a gubernatorial misconception of the fitness of things, we came near losing a few months ago. His personal popularity and adaptability to the work, make him eminently the man for the place. He has the utmost respect of the faculty, and the highest esteem of the entire corps of cadets, who look upon him as the embodiment of the law and the gospel, wherein firmness is tempered with kindness, and efficient government is maintained without being felt. May he long live to guide the destinies of the College, and to train the youth of the state to emulate his example of patriotism and useful citizenship.

COMMENCEMENT EXERCISES.

The first day opened bright and clear with the sound of the bugle note. Guard mount and breakfast over, all was in readiness for the regular inspection. Quite a crowd accompanied the commandant on his tour, each and every one remaining on the neatness of the rooms, and the fair young ladies especially, marveled at what a boy can do when he has to. Beds without a wrinkle; shoes polished and placed in order; floors so free from dust that they would not soil a handkerchief; windows polished and shining, and clothes neatly hanging behind a curtain. Every one seemed pleased with the result of the inspection.

Promptly at 11 o'clock the bugle sounded for chapel, where the Rev. Dr. McLean delivered the commencement sermon. His text was Matthew vi:23-25, and his remarks were a marvel of eloquence and force.

The Y. M. C. A. was addressed by the Rev. Mr. Smith, who spoke on "Christianity and Success," showing by powerful arguments and illustrations that none can find absolute rest except in God, through Jesus Christ.

MONDAY, JUNE 10TH.

From 9 to 12 a. m. was the inspection of departments, including exhibition of stock, apparatus, and different appliances of instruction, display of students' work, and also the students at work. During this time the trains from Bryan brought large crowds out, and the buildings were full to overflowing. Some were viewing the cattle; some, implements of agriculture; others marveled at the perfection of this department and that department, and all agreed that the display was magnificent and

worthy the praise which it received.

The alumni was called to order by President F. E. Ross at 2 p. m., who extended an invitation to the graduating class to join their ranks. Secretary-Treasurer Hutchinson reported the association out of debt, with \$93.30 in the treasury, and \$110 due, bills for which had not been sent out.

Marion Law, of the graduating class, delivered the address of welcome, responded by President Ross.

J. M. McNair delivered the oration. A committee was appointed to revise the Alumni record for catalogue, consisting of Messrs. Philpott, Abbott, Mitchell, Adams and Smith. B. C. Pitruok, of Dallas, was elected president; R. O. Watkins of Bryan, first vice president; E. A. Wright, of Paris, second vice president, and H. J. McNair, of Navasota, third vice president. Prof. Giesecke was elected secretary-treasurer. A. M. Ferguson still holds the position of Alumni editor of Battalion. The Association passed resolutions of thanks to faculty and cadets for their entertainment and courtesy. The attendance of Alumni was small but special effort will be made to secure a larger attendance next year. Gentlemen of the Alumni, remember your obligations; remember that the College is largely dependent upon you for the maintenance of her honor and reputation, and for the development of a public sentiment that will prevent any person in authority from clipping her wings or staying her advancement. Remember your Alma Mater, and come home at the Commencement of 1896 at least a hundred strong, and make the old lady proud.

The Battalion was passed in review and inspected at 3:30 p. m. The inspection was almost perfect, the boys being in magnificent condition. The cadet band has done away with the hiring of the U. S. band, and is quite a feature of the College. Following this was an exhibition drill by Ross Volunteers. Their drill was never better, and the bayonet exercises, by way of diversion, was a rare treat. The exercises for the day closed by the joint meeting of the Austin and Callopan Societies. The orator for the occasion was E. A. Wright, of class of '92. Music by the College band and Glee Club were pleasing features of the programme.

TUESDAY, JUNE 11.

The Commencement exercises proper began at 10 o'clock. The Hall was crowded almost to suffocation. The rostrum was occupied by Pres. Ross, the Board of Directors, Senator W. P. McComb, and other distinguished visitors. Exercises were opened with prayer by Rev. Lysle Smith, of Whitesboro. Senator McComb was then introduced, and spoke at length on the "Influence of Industrial Education and Life in Civilization." Russell C. Watkins, valedictorian, addressed the audience. F. D. Perkins responded in behalf of the second class.

The exercises were interspersed by music by the Glee Club and band. The following is a list of graduates: W. Amthor, W. M. Moore, J. Adams, E. C. Watkins, C. E. Burgeon, B. W. Burleson, M. McMillan, A. W. Bloor, H. Clark, H. T. Coulter, W. Coulter, A. P. Duggan, A. H. Fitzgerald, A. G. Farmer, J. R. Holman, W. F. Hutson, H. P. Jordan, M. Law, H. B. Martin, H. F. McDonald, E. B. Mouser, W. A. Polk, A. F. Moursand, A. U. Smith, D. D. Wells, A. T. Wight, and G. R. White.

The degree of M. S. was conferred on Prof. A. L. Banks.

The main feature of afternoon exercises was the sham battle. Following this was Grand Dress Parade, the last of the year. Following is a list of promotions made in corps of cadets for the following year.

Captains: Cadets Park, E. Kerr, Burney and Krug.
First Lieutenant and adjutant: Cadet F. D. Perkins.
First Lieutenant and quartermaster: Cadet Goldberg.
First Lieutenant and private secretary: Cadet Hildebrandt.
First Lieutenant and ordnance officer: Cadet H. L. Hutson.
First Lieutenants: Cadets Gross, Ball, Sanders, and J. Blount.
Second Lieutenants: Cadets Sherer, Hutchinson, Miley, H. Kyle, Staples, Bittle, Rhodes, Howell, Rosenthal, Wisdom, Gilmore, Finney, McNeil, Reed, J. Kerr, S. L. Blount, Sherwood.
Sergeant major: Cadet A. Kyle.
Quartermaster sergeant: Cadet Hyatt.
First sergeants: Cadets Leavell, U.

for the Jenness Miller monthly, published at 114 Fifth Avenue, New York. It is one of the very best magazines of its kind (of course, we all love the Ladies' Home Journal). It has a page, or two, or three devoted to fashion, but I do not subscribe for it on account of that; personally, I do not like them. But I do like the foundation principles upon which they are made. I suppose all of us have heard of the Jenness Miller system, or dress reform, but she says not call it dress reform, but dress improvement. I like the reading matter her magazine contains. In each issue is a page or more on "Kindergarten lessons for the Home," "Talks with Parents," conducted by Ada Mareau Hughes, and they are splendid, too. It is a first-class magazine in almost every respect, and I would not allow my subscription for it to expire any sooner than I would that of the Home Journal.

Pardon my long stay.
Lee Gally, you have my permission to occupy the rug again.
Columbus, Texas.

ONE WOMAN CAN DO IT.

LEO JENNYL.

You quarrel so pleasantly, Myra, that I do not in the least regret my tilt at you, and I feel that I have gained quite a feather in my cap by drawing forth the nice things you said in the closing of your letter. Thank you very much for your compliments, and also for your letter, which proves what I believed in the first case, that you had not said exactly what you meant to in your other letter. Yes, as Mrs. Buchanan explained, I meant just as she says, "Everything that stands the test of two, even more generations, is not necessarily good, but that which age and a conscientious public have endorsed and adopted must be good," and I said that what two or more generations declare to be bad, must just as surely be bad.

You expressed what I think too, Myra, when you say that fiction throws a glamour over sin, but I must point out to you the fact that some fiction does, and some does not, and that is the reason I think The Heavenly Twins so far superior to Tribly. I would allow a girl or young man to read the former, but never would I give either Tribly. Du Maurier makes you feel that poor Tribly was more sinned against than sinning, and that Taffy and the Laird were delightful, while Little Billee was an angel, whiter even than purity itself. What wonder is it that the world has gone mad over Tribly when nudity is made synonymous with virtue, and rolling around the streets in a disgusting state of drunkenness is jested at as a capital joke, to say nothing of men belonging to respectable families hobnobbing with bar maids, washer women and cooks. There is a most decided glamour thrown over gutters and sewer pipes by Du Maurier, but take up Mme. Grand's novel and mark the difference.

How many mothers are there I wonder who talk freely to their boys and girls about the difference between social right and wrong? I have never known even one who does it—not one. But I have heard dozens of mothers say, "Oh, I never could talk to my children on such subjects." If I had the physical strength or the money, I would try to start a crusade against mothers who will not talk as freely to their own children as they do to a neighbor, and I would wage warfare with the mothers who tell their daughters that it is useless to expect purity in men, for the men who were most pleasing to God in the beginning of history were thoroughly immoral, and that man will be immoral as long as he lives. History proves that men have always done as they pleased, and it also proves that women, with the exception of a very few, have always been willing that they should. Doesn't a mother always think it smart of her son to induce a girl to kiss him? Doesn't she ever after make her daughters shun the girl whom her son can kiss?

If you talk to a woman on the urgency of raising the quality of masculine morals to a higher plane, she will agree with you that it is a consummation most devoutly desired, but she will hastily add, "One woman can do nothing by herself—she must have co-operation. If all will band together, some good may be achieved." If every woman says she can do no good until all of the others have united, where are the atoms to come from that are to constitute the ball, which in rolling will gather to itself magnitude and velocity, and then speed on to its goal? Why cannot one individual woman achieve success unaided? Can she not, if she be a maiden, decline to accept the attentions of men

who are not her equals? Can she not, if she be a mother, so thoroughly imbue her sons and daughters with a determination to be moral, and to make their children after them moral, that it will be second nature with them?

We need more Carroll Cones in this world. I enjoyed Olive Schreiner's Dreams greatly, Carroll, but I have met so few who seem to have read them. Winifred, give us your opinion of them. I have often wondered what Olive Schreiner's religious views were. She seems like Sarah Grand, entirely unsatisfied with the hollowness and contradiction that are so evident everywhere. The African Farm was one of the most powerful and at the same time hopeless cries of suffering humanity I ever read.

Trixy, I asked you a question last December which you never designed to answer. I hope your coming now signifies that you will answer it soon. You say you are one of the "blue" girls, so come again and tell us how you were trained through your childhood.
Tallulah, La.

CUT THE HAIR OFF.

HATTIE HAMMON.

"O, mamma, please put my hair back; it is so very warm," said a little girl of seven years. She was perspiring freely, and her face resembled the much quoted "boiled lobster."

"No, daughter," answered the parent, "all the other little girls wear their hair hanging, and you don't want to be different from them, do you?"

"But, mamma," persisted the child, "you wear your hair done up, and you don't know how warm it is for me with so much hair hanging on my neck and blowing about my face and ears." Why don't you cut it off any way?" petulantly continued the child. "Mary Miller wears her hair short, and she says it is nice and cool, besides she has no snarles."

The mother looked horrified at this outburst of childish individuality, but silenced her offspring by: "You cannot have your hair cut off, neither will I tie it back; while the style remains this way, you must wear it so," and the little girl in perspiring disgust, was compelled to submit.

Mothers, I wonder if this child does not echo the sentiments of hundreds of our children; nor are girls alone the sufferers in this particular, for many boys are allowed to go unshorn until six, perhaps seven years of age.

For my part, I consider the children's present mode of wearing the hair about the neck, ears and face, little short of sinful. It is not only disfiguring and looks untidy, but is uncomfortably warm and may permanently injure a child by over-heating the brain.

Yes, I know a little girl with a well kept head of hair is a beautiful sight, but how many of our acquaintances can we name who enjoy this distinction?

Children will be children (we would not have them otherwise), and they will play in the wind and weather, thereby causing distress to the best regulated hair comb, to say nothing of the heat and discomfort, and not infrequently, the disheveled and disreputable appearance of a child, calls forth on the part of a parent, unnecessary and, mayhap, untruthful apologies to a chance caller, such as "lack of time," etc., when in fact it is only the present mode of allowing the hair to hang loose at the sport of the wind. Therefore, to mothers who have not an abundance of time to devote to hair dressing, I would say: Cut the hair off, and keep it cut off, until your girls are on the threshold of womanhood, and if they are still sufficiently unconventional to prefer short hair, do not bind them to the customs of society at the expense of comfort, cleanliness, and a great waste of time in caring for the same. Calculating that one spends fifteen minutes combing a child's hair, which is a conservative estimate, considering the snarles, tears, reprimands, perhaps punishment in the meantime. Fifteen minutes a day means nearly two hours a week, and at the rate of ten hours a day, represents ten days out of every

year; and if one has half a dozen like tasks to perform, two months out of every twelve is passed in this way, and remember it is not only the parent's time wasted, but the child's as well.

"But," you say, "shall we transgress all the time honored customs of our ancestors and set at naught the old idea that 'woman's hair is her crowning glory,' etc? I answer most decidedly, yes, and the sooner the better, if our time cannot be employed in improvement, for a crown, however glorious, is unappreciated and ceases to adorn when the head beneath it is empty.

The mother referred to above is entirely oblivious to the fact that her child's companions are objectionable, but the foolish and absurd (to her sacred) conventionalities of society must not be transgressed.

It is a subject for wonderment that with such training a few persons still have the hardihood to step out into the light and say, "I am for comfort, and health, and right living, in the best and truest sense in which I am capable of understanding it, and will cast my influence on that side, regardless of the established customs that are uncomfortable, unsanitary and not conducive to a higher intellectuality."

5335 Emerald Ave., Chicago.

RECIPES.

GREEN TOMATO PICKLE.—Take large green tomatoes and cut in slices; add half as many sliced onions, sprinkle with salt and let stand six hours. Pour off the juice and season the tomatoes with black pepper, mustard seed, cinnamon bark, a few whole cloves and allspice, and a little sugar, let it cook slowly for half an hour, put in a jar and seal.

RIPE TOMATO SWEET PICKLE.—Pour boiling water over ripe tomatoes and remove the skin. Place them in jars, cover with apple vinegar and let them remain three days. Take out of the vinegar, put in a preserving kettle; add three fourths of a pound of sugar to each pound of tomatoes; add teaspoonful each of cinnamon, cloves, allspice and mace, not ground; let boil several hours until the tomatoes are clear and then seal up in jars.—Aunt Dennis' Cook Book.

TOMATO CATSUP.—Wash, mash, and boil until tender with two tablespoonfuls of salt, half bushel of ripe tomatoes; let them cool, then rub through a sieve; return to the fire and boil until thick; add half ounce each of ground cloves, cinnamon, and black pepper, three pounds of sugar, and one quart of apple vinegar; let boil for fifteen minutes, bottle and seal. Using ground spices in the catsup will make it dark, but they greatly improve the flavor. Never use water in making tomato catsup; if the tomatoes are sufficiently mashed when put on to boil, they will not need water.

A PROFITABLE COMBINATION.

Musical Record.

The drummer stepped into a store in a Western town where the proprietor had a stock of guns and musical instruments.

"Isn't that a rather queer combination?" he asked.

"There's money in it for me," replied the proprietor.

"I don't see how."

"That's because you ain't up in our ways."

"Well, put me up."

"It's this way," explained the proprietor. "I sell a man a cornet, a banjo or fiddle, or something like that, and by the time he has practiced a week, his neighbor comes in and buys a shotgun, or revolver, or something like that, and I get a profit goin' and comin'." See?"

Mrs. Blues—Do you have to treat your cook as if she were a member of the family?

Mrs. Greys—Goodness, no! We have to be very kind and polite to her.—Tid-Bits.

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

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the time, but much more rapidly during the flow from the teat, whether the cow is being milked or sucked. At this time the functional activity of the cells in the vesicles is greatly increased, especially the fatty degeneration, and the conversion of albumen into casein. This is proven by the fact that the strippings are richer in butter and casein than the rest of the milk. Unnatural excitation of these nerves and of the whole system diminishes both the secretion and the flow. Dr. Baker calls attention to the fact that this is seen when the milker's fingernails get long and he wounds the teats, the cow gets uneasy, she will step away from him, or perhaps kick him over, and he goes to pounding her or scolding her, or if a stranger attempts to milk her, or even simply changing milkers among the regular hands, she will, in such cases, hold her milk up in the udder, and you cannot get it till she gets quiet again, and condescends to let you have it. During this holding up of the milk, the secretion of it is almost wholly arrested. To avoid all of this, and to get the most and best milk, let the cows be milked regularly, at least twice a day, and by the same milkers, and enjoin upon them to keep good natured, kind and quiet, and to trim their finger nails often, and as far as possible to keep the teats sound.

THE CRAZE FOR FREE LAND.

Farm Machinery.

"The opening of the Kickapoo reservation only emphasizes the fact that there is a large class of people that are never contented in this country," said Geo. Hoffman, superintendent of the Bauer-Walter Buggy and Carriage Co., St. Louis. "The Americans are naturally restless, but the most of us fortunately find relief in work, or in other ways consistent with a settled life. It will be seen, upon investigation that a large proportion of the would-be homesteaders are professional movers; that is, men who never live long in one locality. They will take up a claim and hold it either until it will sell for a few hundred dollars, or until they get tired of waiting and then seek pastures new and green. It is doubtful if they could be induced to settle down for life on the finest farm in the country. Existence upon one tract of land year after year would be intolerable. It must not be taken for granted that they are indolent, for they work hard, and some times make money by selling out. The majority of the people who rush, though, were apparently well-to-do, or at least independent farmers. Some of them 'sold out' in order to try their luck, others, however, disposed of everything, believing they could better themselves. On their way out from the East, they passed through old-settled States where land is still to be had at a ridiculously low price, and these States will catch many of them on the rebound. Take Missouri, for example: A few weeks ago, thousands of farmers went right through the State in their eager rush for free land, not stopping to investigate the possibilities that would certainly have kept many of them from spending money upon their fruitless trip. There is another thing that will bring back a considerable number of the homesteaders who are lucky enough to secure claims, and that is the disappointment, if not disgust, they will experience before they have been there a year. If they have been accustomed to a timbered country, the prairie will get intolerable. It is a good thing for the country that nearly all the reservations have been thrown open for settlers."

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The dam of the young bull I have for sale is Sylvia Baker 8d 7870. Her sire, Alpheanay Chief 2918, has several daughters in the list. His sire is the great Signal 1170. Sylvia Third's dam, Sylvia Baker 8708, is a 20 lb. 10 oss. cow. Sylvia Third's, on a private test, is 17 lbs. 8 oss. butter in a week, and an average of 88 lbs. milk daily. The animal offered is perfect as to individual points. Grey fawn, large for his age and pretty as a picture. He is dehorned. In good condition. Who wants him? Address Wm. W. Folsetter, Dallas, Texas.

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Cousins' League.

The Cousins League will hereafter be merged in the Household Department. The cousins should address their letters to Mrs. S. E. Buchanan, care of TEXAS FARM AND RANCH, Dallas, Texas.

SHORT LETTERS.

Laura Gardner, Laurence, Texas, writes:

Dear Aunt Sallie: I want to join the happy band of cousins: I am eleven years old. My one pet is my little brother, Jesse, who is the sweetest baby in Texas. He is one year old and can walk.

[Ours is a big band of happy little and big cousins, Laura, who are always glad to welcome another one.—AUNT SALLIE.]

Addie Harmon, of Blue Grove, Texas, is thirteen years of age. She loves to read the cousins' letters. Her only pet is a baby sister. She can help in all kinds of housework. Baby sisters are the sweetest and dearest of all pets, I think, Addie.—AUNT SALLIE.]

Dear Aunt Sallie: I want to join the Cousins' League. I am a little boy, ten years old. My only pet is a hen. Hurray, boys; be up and doing. The girls will beat us. I can do any kind of field work, and my father is a gardener.—CURTIS KINCAID, Petrus, Texas.

[How do you manage that hen, Curtis? Do you eat her eggs or set them? It is a very quiet pet for a lively boy.—AUNT SALLIE.]

Winnie Crouch, Moulton, Texas is a little girl, eight years old. She is a very rich little girl. She has four brothers, two grandmothers and two grandpas. Don't you know, cousins, that she must have a happy home, with so many to love and pet her, besides mamma and papa?—AUNT SALLIE.]

Bascom Wood, Elk, Ark.: Dear Mrs. Buchanan: I have never written to a paper before, but I like to read the cousins' letters, and thought I would write. I have a pony which is very gentle. I live on a farm and like it. You are very welcome, Bascom, to the League. All our little folks are beginners.—AUNT SALLIE.]

Dennis Reynolds, I know your patience has been tried, and I must thank you for your courtesy in waiting. The letter box continues full to overflowing, so I have concluded to give your list of names of boys and girls who have pledged themselves against strong drink—at least a part of the names, and I will continue them until all in hand are gone, or as many more as are sent in.

Dear Aunt Sallie and Cousins: I have been reading the cousins' League for a long time, and think I will join it if you will let me. I am thirteen years old. I go to school when it is not too cold. I live two miles from the school house. Last Friday, when three of my brothers and I were going to school, we got to town, and some of the boys told us there was not going to be any school that day, it was too cold, and I will tell you all what we did then. We saw some boys and girls over on the pond skating on the ice, and we joined the merry group. Christmas day mamma and papa, and three of my brothers and sister and myself went to the bayou and spent the day. We had a nice time down there. We made swings out of grape vines. When we started home it began to rain on us. I hope to see this letter in print. Love to aunt Sallie and the cousins.—SYDNEY J. MEEK, Arcadia, Texas.

[It was too cold for school, but not for fun, Sidney. I can't blame you for having a fine time on the ice, as it is only once in many years you can have that pleasure in your sunny climate.—AUNT SALLIE.]

Dear Aunt Sallie: I am a little girl, ten years old. I have never written to the cousins before. We take TEXAS FARM AND RANCH, and I think the letters are so nice, so I thought I would write. I live on a big farm. We have lots of chickens and hogs and horses. I have five brothers and four sisters. Love to all.—ROSA BRISOR, Caddo Mills, Texas.

Dear Aunt Sallie: I have been thinking for some time I would write to the Cousins' League. Papa has been taking TEXAS FARM AND RANCH for two years. We think it is the best paper in print. I am a little girl, ten years old. I have three sisters and two brothers. I have no pets, only a little baby brother and little chickens. Mamma raises a great many. She has 225 now, and the incubator

is hatching again. She raises them with brooders. She has four fine breeds of chickens. I can wash, iron, and sew. Mamma teaches sister and I at home. With love to you and the cousins, good-bye.—EDNA BILLINGSLEY, Floresville, Texas.

[My, how I would like to dine with you to-day, Edna. I know I would have fried chicken or chicken pie in abundance.—AUNT SALLIE.]

Dear Aunt Sallie: I have just read the cousins' letters, and was so pleased with them that I thought I would write. I would like to join your merry band. I am a farmer's daughter, fourteen years of age. I am not going to school now. The weather has been so bad that our school closed. I was not very sorry, because mamma's health is not very good. I am glad to know that I can stay at home and help her awhile. I can do most any kind of housework. As this is my first attempt to write in the League, I hope to see this in print. Love to Aunt Sallie and the cousins.—ELMA SMITH, Fairview, Ark.

[It is always pleasant to know that our cousins love their parents, and wish to help their mothers with household work. I think when a girl writes thus, "she is a good girl, and will make a good woman."—AUNT SALLIE.]

Dear Aunt Sallie: As I have just come home to spend a week's vacation with papa and mamma, and found TEXAS FARM AND RANCH, which papa takes, and seeing so many nice letters from the cousins, I thought I would attempt to write a short letter, if you would admit me more little school girl. I have been staying at Geneva with my sister, going to school. The school had to be suspended on account of the measles. I like to go to school very much; my teacher's name is Professor J. B. Wilkerson. I am ten years old. For fear my letter will be too lengthy, will close, and leave space for some one else. I will attempt again. With love and best wishes to Aunt Sallie and the cousins, and success to TEXAS FARM AND RANCH, I am your little friend.—MATTIE WESTMORELAND, West, Texas.

[I hope you will come again, Mattie. Your letter is well written. Before this, I suppose you are enjoying your summer vacation.—AUNT SALLIE.]

Mrs. S. E. Buchanan: I will write a few lines to the Cousins' League. Papa has been taking TEXAS FARM AND RANCH for quite a while, and I like to read the League very much. I was born on the great Mississippi river in 1882, and lived there until 1890, when we moved to Texas. I am in the sixth grade at school, and have only been going to school three terms. My pets are two neices and a nephew, whom I love very much. Hoping to see this in print, I will close, with love to you and the cousins, and a hurrah for TEXAS FARM AND RANCH.—KATE STONE, Iowa Park, Texas.

[Thank you, Kate, for your kind wishes. You doubtless have learned to love your Texas home very much, as all of us do who come to Texas.—AUNT SALLIE.]

Dear Aunt Sallie: I have been reading the letters in your nice paper; they make me want to write one. I will be six years old the 23d of this month. I love books. I get my lessons most every day. I have read eight books through this winter. I will give you the name of some of them: Mother Goose, All the Year Around, Story of the Gospel, Young America Stories, and Picture Lessons for Little Ones. I have read the primer up to the third reader. Aunt Sallie, if you will come to see us I will say my birthday speech for you; it is five verses long. Oh, I have a good mamma to try to teach me. I do love her so much.—LUMMIE McDONOUGH, Duncanville, Texas.

[You are a fine scholar for one of your years, and I wish I might visit you and hear you recite. That is right; love that good mamma, who is so attentive to you.—AUNT SALLIE.]

Dear Mrs. Buchanan: I would like to join your happy band. Papa takes TEXAS FARM AND RANCH, and I like to read the cousins' letters very much. I am a little Nebraska girl, and have only been here about a year. I go to school, and my teacher's name is Miss Wafer; I like her very well. Our school has closed for two weeks on account of bad weather. I have been going to Sunday school every Sunday, but a big wind blew the church off its foundation, and

I have not been since. I have no little sisters or brothers to write about, but I wish I had. I have often wished somebody would leave a baby on the doorstep. I will answer Olin Gaston's question:

What man was president for one hour? William Henry Harrison. I will bid the cousins all good night.—MARY WHITFORD, Webster, Texas.

[I wish you had a little sister to pet; perhaps mamma might take one of those little homeless ones of whom I wrote last week. I hope you will learn to love your new home.—AUNT SALLIE.]

Dear Aunt Sallie and country cousins: If you will allow me I will make my appearance in the League for the first time. I am a school boy thirteen years old. I study five books. My papa takes TEXAS FARM AND RANCH. I have no sisters or brothers for pets, and no mamma. She died when I was three years old. I will tell you a joke on some of our neighbor boys: It snowed last week and the boys went coon hunting, and they took axes and saws and a horse and sleigh, to carry their tools and wood to make a fire, while they cut the trees down. We moved from Kaufman county two years ago to Van Zant county. We live six miles from Wills Point; we live on the prettiest farm you ever saw. As this is my first letter I will close. Good luck to cousins and Aunt Sallie.—FRANK HARRISON, Wills Point, Texas.

[You must be quite lonely sometimes, Frank. I am sorry that your dear mamma was taken from you. It is nice for you to think your home is the prettiest place in the world.—AUNT SALLIE.]

Dear Aunt Sallie: Please let me join the League. I am a little girl ten years old. I am going to school; my teachers' names are Mr. Kennard and Miss Lella Everett. We have a large school now. I like to read the cousins' letters. I have been wanting to write for a long time. My papa takes TEXAS FARM AND RANCH; he has been taking it ever since I was a baby. I have not seen any letters from Rosebud, and I thought I would write. I have only two pets; my doll and baby brother; he is fourteen months old. We live close to Rosebud. It is a small town; we have two churches. I will write again if I see my letter in print. I will close for this time. Love to Aunt Sallie and all the cousins. Your little friend.—LENNA GREER, Rosebud, Texas.

[What a poetical name for your little town. Can't you tell us why it is called Rosebud?—AUNT SALLIE.]

Dear Aunt Sallie and cousins: I have been a silent reader of the League for some time, so I thought I would write and see if I would be welcome in your League; if so, I will come again. I am a blue eyed girl of seventeen summers. They call me Blue Eyes. I have a sister older than myself they call Brown Eyes, and one younger that they call Red, because she has red hair. My papa is a farmer; we live two miles south of Waxahachie; it is a beautiful town. We live on a hill where we have a nice view of the town. We look through the spy-glass and can read the signs on the dry goods houses. Yes, Dixie, I am one who lives in the black waxy land. Have been living here thirteen years; we came from Alabama to Texas. Papa has been back to see his mother several times since we came to Texas. Aunt Sallie, my mother is dead, too; you said that your mother died when you were young. My mother died when I was only two years old, and I know when any one gives up a mother they give up the dearest one on earth. Well for fear that such a long visit will not be appreciated I will bid you all adieu.—LUOY PRINCE, Waxahachie, Texas.

[Certainly, Lucy, you are welcome. I know how pretty the town looks over the high hills around Waxahachie. I am very familiar with the town and the country around. My heart is always in company with a motherless girl or boy.—AUNT SALLIE.]

Dear Aunt Sallie: I would like to join the League very much. I am a country girl and love the country. It

is the place to enjoy the beauties of nature. Of course the city people have better advantages of education and can live in better style than those in the country. But what is lovelier in the evening twilight than to roam amidst the beautiful wild flowers and view the rippling waters and the growing crops? Some of course love the city with its noise and fashion and could not be contented out in the country. But give, oh give me a free country life! Flowers for my playmates, birds for my music teachers and the nice cool shades of the trees for my parlor and the soft green grass for my carpet, and I am happy and content as any lover of nature can be. I would like to have some of the cousins write to me. I will close.—LELIA HOLLENSWORTH, Big Hickory, Arkansas.

[I love Nature too, Lelia. No sorrow or care can ever come between her beautiful face and my heart. She is lovely in every phase or mood, and always charms and soothes.—AUNT SALLIE.]

HEART AND HAND BAND.

DENNIS KILGORE.

IS YOUR NAME HERE?

Mrs. S. E. Buchanan: I will report the names I have on the "Honor Roll." I will only give names and address.

Mrs. S. E. Buchanan, Dallas, Texas; Miss Alice Young, Shreveport, La.; Miss Emma Smith, Luella, Texas; Benton G. Hamlett, Alvin, Texas; Charlie Cumble, Hatton, Texas; Miss Lizzie Latimer, Ennis, Texas; Walter W. Harrison, Mountain Home, Texas; Andrew Jackson Kirk, Avalon, Texas; J. B. Hall, Kilgore, Texas; Miss Beatrice Clarke, Harris, Ark.; Dennis Reynolds, Kilgore, Texas; Rae W. Clark, Harris, Ark.; Peter Tyler Clark, Harris, Ark.; Philip Jenkins, Bosqueville, Texas; J. W. Smith, Kilgore, Texas; Miss Mossy Ross, Nix, Ark.; Clarence Vann, Austin, Texas; Delia Vann, Austin, Texas; Miss Ella Vann, Austin, Texas; Miss Flay Craig, Willie Craig, Stark, Craig, Jamestown, Ark.; James McDaniel, Jamestown, Ark.; Read W. W. McAnally, Kilgore; Mrs. A. L. McAnally, Miss Lula McAnally, Mr. J. F. Reynolds, Mrs. H. L. Reynolds, Kilgore, Texas; Miss Pearl Butts, Edgar Butts, Ernest Butts, Chillicothe, Texas; Frank Taylor, Oscar Austin, Avalon, Texas; Miss Bassie Flow, Kilgore, Texas; Miss Minnie Morrison, Miss Mabel Kay, Kilgore, Texas; Mrs. M. W. Briggs, Kilgore, Texas; Simanah Carter, Hilsboro, Texas.

You see our roll is progressing nicely and we will soon have one of the grandest rolls that was ever made. I have received two or three names that I will give and let Mrs. Buchanan decide which one we will take, or we will let the members vote on it. Miss Alice Young gives the Temperance League, Anti Liquor Band, and Miss Lizzie Latimer gives Temperance Band; Mrs. Harrison gives Heart and Hand Band. Some write and say they are too old to put their names on the roll, so I guess we had better let any one join who wishes to, if they are not over 100 years old. So you need not be afraid that you are too old, but send in your names and we will keep the work going and maybe after while we can have a badge with the name of our roll on it, and again perhaps some day we can all meet at some place and have a great time, say at the Dallas Fair. What say you?—DENNIS REYNOLDS, Kilgore, Texas.

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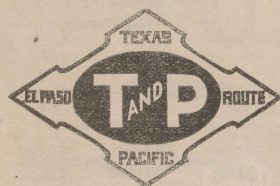
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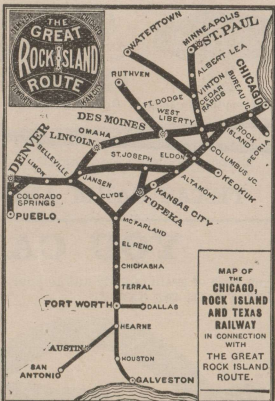
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Farm Implement News, weekly.....	2 00	2 50
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I should have acknowledged receipt of the Corn
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time ago. It came all o. k. I have thoroughly
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Cement; 1 ball Wax; 1 ball Shoe Thread; 1 bunch Bristles; 1 Harness and Saw
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Farm Machinery.

ON PLOWS AND PLOWING.

WM. LOMAS.

In my paper on plows in *TEXAS FARM AND RANCH*, May 18th, ult., by several typographical errors I am made to say team and beam in a rather confusing manner, which I hope will be pardoned. Now let me be understood: "A shorter plow beam will bring the team nearer to their work, and will therefore be easier on them; longer plow handles will give the man more purchase when he needs it; and a longer mould board, with more twist, will cover trash or green manure better, and will run steadier, and otherwise do better work. Of course, I am writing of the general purpose plow, for on the right use of this, at the right time, largely depends the success of this great Southwest country. I am pleased to see the statements of Prof. J. H. Connell on subsoiling, but I would subsoil every furrow, and I think it will be found that in the Southwest, subsoiling every season will be the most beneficial. In this we have as yet hardly reached the experimental stage.

I am also pleased to see your Georgia correspondent inviting to discussion on this subject. I hope our brother farmers will not think I have got plow to sell, or that I am one of those fault-finding cranks who are never happy except when miserable and making every one else the same. If I can show another how to make two blades of grass grow

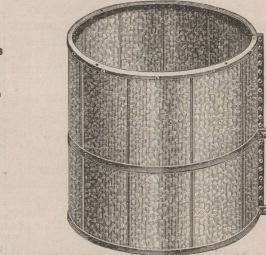
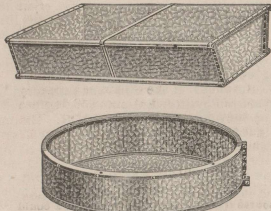
Messenger boys and ministers of the gospel, business men and editors, laborers and persons of leisure, men and women, boys and girls. Everybody who ever rides a bicycle likes it. The ability to glide away at the rate of half a rod at a step and the step easily taken— notwithstanding the slight attention given to balancing the machine and to avoiding collisions—contributes to the popularity of this popular conveyance.

On the score of economy, business men find the bicycle cheaper than street car fares and that less time is consumed in going and coming than by any other means. Laborers frequently reside long distances from their work, and they like to ride a bicycle. Packages to the weight of ten or twenty pounds are easily carried. Whole families use the bicycle for recreation, and for their use the machine has been made with two seats, with sometimes an attachable chair for the baby.

The demand has led to the establishment of immense factories devoted exclusively to their production. These have greatly multiplied during the last year and yet the market calls for bicycles more rapidly than they can be supplied. Wholesale dealers order them by the thousands and then enlarge their orders. It is said that many of the manufacturers are unable to take any more orders for the present season. Is the bicycle a passing fad, or has it "come to stay?"

GALVANIZED STEEL TANKS.

Modern advancement has been largely



where only one was wont to grow, the verdict will be all right. I am not going to exhaust the discussion on plow, but rather open the way for others. It would make this paper too long to begin and finish the next topic—The Team—so please wait.

I wish to be allowed to say with regard to subsoiling, that once the subsoil was broken up—stirred—after subsoiling would be much easier, and the organized fertility of the soil would deepen, as the soil would be more permeable to the fertilizing elements derived from the atmosphere.

BICYCLES.

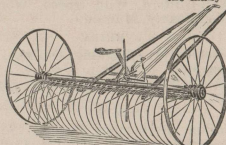
From a rather curious toy or plaything the bicycle has rapidly advanced to the dignity of a vehicle. From a fad of the boy or the fast young man, it has gained a place of respect with young and old of both sexes. From a means of amusement on a smooth-floored hall, it has become a useful time-saver over even ordinary roads. The bicycle has been in court, too, and several State Supreme courts have decided that its rights to a share of the public highway are as valid as if it had been used by Noah and his family on emerging from the ark, or even by Adam and the other people who lived before the greatest rain storm recorded in history.

The bicycle is displacing many horses formerly used, especially in cities and towns, for business and pleasure. The man who lives a mile or two, or even further, from his business, mounts his two wheels, from his neighbor in his buggy. The neighbor had fed his horse before breakfast, while the cyclist was reading his morning paper or taking an additional morning nap; had hitched his horse to the buggy while the cyclist was finishing his breakfast, and had trotted down the street while the cyclist was taking his "wheel" out of the porch. The cyclist is busy at his desk by the time the horse and buggy are provided for down town. The cyclist enjoyed his ride, and while not sorry for the neighbor with the horse and buggy, wished, as he passed the man on foot, that the price of bicycles would come down to a dollar a pound.

The riders of bicycles now are men and women in almost every walk in life.

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A certain railway official wrote the editors in charge of fencing on four great Railroads, where "the Puge" is in use, asking their "honest opinion" as to its value. He considered the answer so very favorable that he gave a large order for the Road he represented. The replies were confidential, but he stated that the strongest endorsement came from where "the Puge" has been longest in use. If farmers took such precautions, those who furnish "cheap" wire fences would go out of business. PEACE WOVEN WIRE FENCE CO., Adrian, Mich.

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ECLIPSE HAY PRESS CO. LAWRENCE, KANSAS.

Farm and Stock.

"Verily I say unto you, whatsoever a man sows, that also shall he reap." That's all right; but too many people reap that which other people sow.

Mr. F. E. Roessler, was in Dallas last week from the Pecos Valley. He reports that section in a flourishing condition and also that he has never seen better prospects for crops along the T. & P. from Dallas west; corn, sorghum and oats are everywhere and cotton "out of sight"—in a literal sense.

A great deal of our prairie hay is cured too rapidly; there is too much hurry to make hay while the sun shines, when it is a fact that hay cured fully in the heat of a blazing sun, loses much of its value as a feed and becomes hard and insipid. When prairie grass is cut early in the day, it should, when well wilted be raked into windrows, and afterwards—same day—into small cocks and let it cure. Watch these cocks to prevent souring.

It is now a good time to plant cow peas, with last plowing of corn. They may be sown broadcast ahead of the plows, or, where corn rows are four feet apart, in the middle; or when corn is in closer rows, drilled in the first furrow and covered with the next. Any way it is well to plant peas, and when you have planted peas, if you have any more room plant more peas. They are good for the animals, good for the family, good for the land, and any surplus is good for sale to the grocers or seed dealers.

The recent rains throughout Texas insure a large crop of corn, hay and forage. This will fit perfectly the increased demand that will appear at feeding time. Texas will feed more cattle and hogs this fall and winter than ever before. The cotton crop does not promise so well, but this is not a serious calamity. We can do very well with less cotton than usual, for a small crop is worth as much as a large one, and requires less labor and expense to produce it. The agricultural outlook is good; plenty and to spare will be found on every hand at harvest time.

During the past week more heavy rains have fallen pretty much all over Texas. This is rather hard on that class of farmers who never plow their crops until they have weeds and grass to kill—those who think they save time by waiting until these growths get well advanced and then killing them all at one plowing. If a wet spell sets in about the time they are ready to go into the fray—well, there's where the trouble begins. Those who keep the plows going, killing weeds before they come up, are all right, for they have good start in the race. In the southern part of the state, where the methods of the colored brother prevail, whole crops have been overwhelmed, and will be a total loss, or what is nearly the same will be plowed up and planted in cotton too late, and in land too badly prepared to make much of a crop. The wise farmer takes time by the forelock and keeps well ahead of the season; the improvident gets a tail hold and is caught in the rain with weeds knee high.

Bulletin No. 34, second series of the Louisiana Experiment Station, deals with cattle feeding. In the experiments with cotton seed hulls, cotton seed meal and molasses, the following conclusions were reached:

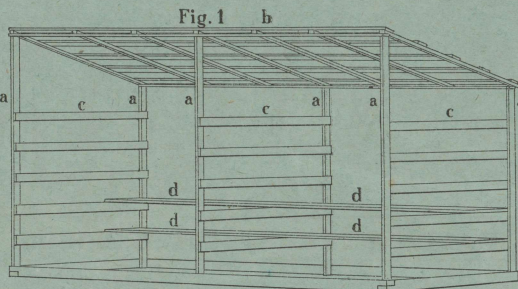
In the experiments it was found that when the animals reached a certain degree of fatness, or, rather, after being fed for a certain length of time upon this ration exclusively, they either lost in flesh or remained stationary. At this point it is deemed always judicious to sell or to change foods, especially replacing the cotton seed meal by grain or bran, until the animals can return to this ration.

It was found advantageous to add molasses to a mixture of meal and hulls to secure a better balanced ration. Four pounds per day, however, seemed to be the maximum amount which could be fed with safety. Increasing this quantity invariably induced "scours." The molasses used was "common black centrifugals, and can be bought in the New Orleans market for 5 cents per gallon. Besides supplying the requisite carbohydrates the molasses rendered more palatable the hulls and meals with which it was intimately mixed, a point of no small importance in feeding.

With beef at the present prices, and

the large number of available cattle all through the South which can be purchased at reasonable rates for fattening, it would seem advisable to recommend our planters and farmers to go into the business whenever cotton seed meal, hulls and molasses can be delivered at reasonable rates for transportation.

A small cotton planter could easily



attend in person to the feeding of twenty head, and if, after his cotton crop is gathered in the fall, he would devote the winter to the feeding of cattle, utilizing all of the "roughness" of his place and supplementing it with purchased meal, hulls and molasses, it is almost certain that he would realize a sum therefrom greater than the profits from his summer crops. Besides the profits from the sale of his fat cattle, he would realize immense benefit from the large quantity of excellent manure which they would give him, and if properly applied to the farm, would soon render the latter far more productive and profitable. With packing houses near us, this industry must grow and prosper. It is, therefore, deemed worthy of trial by industrious, painstaking farmers.

BROOM CORN—No. 3.

GEO. E. FANCHER.

It will not be long now until some of our Texas farmers will begin harvesting their broom corn. And it will be well for those who have not provided a house, barn, or some shelter of some kind to build now.

I consider that a shelter made of sheet

cross pieces without nailing, so that they can be set 12 or 14 inches apart, using two pieces 1x3 for each shelf, and on this you spread your brush to cure after you have stripped it of its seed. Beginning at the bottom near the back wall you put down the first shelf, and spread your broom corn on one to two inches thick. Then put on another

above this in the same way, and etc., till you get to the roof, after which you start another row or tier by the side of the first and go up the same as you did first, and so on till your house is full.

TIME FOR CUTTING.

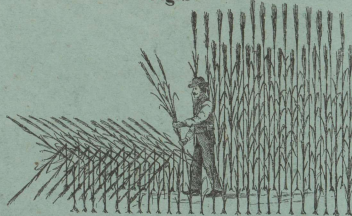
This should be done when the seed begins to make the dough, and push your work through before it gets ripe, if you wish to have nice green brush for the market.

The first thing you do is to table your corn as you see in the illustration.

You take two rows and walk backward between them, and break the stalks down as you go about two and a half feet from the ground. You grab a handful on your right and break or bend toward the left across the row. Then grab a handful on the left and break and lay it across the right hand row. Then take at your right hand again, then left, etc., until you go clear across the patch with your two rows, laying each handful over each other, not right square across, but in an oblique way, and so that tops will project outside of what is now called a table.

Now take your knife which should be quite sharp, and cut the tops, leaving

Fig. 2



iron roofing is the best for this purpose, as the sheet iron will attract more heat than any other material, and thus your broom corn will be cured more properly for it will insure you against mold if the sun shines. But should it be cloudy, rainy weather, it would be a good plan to have artificial heat to consume the moisture inside of your building. This can be obtained in different ways. A large box stove placed in the center of the house will be found of great advantage to keep your brush from molding. Also those who have an engine can, by running some pipes into the house and use steam, save their brush from molding, although broom corn has been cured in the shade without the use of artificial heat, but it requires more room and more care.

You should have a good roof, but the walls should be constructed so as to admit all the air possible inside.

You should prepare shelves to spread your brush on. This can be made of lumber 1x3. Two pieces being enough for one shelf for the corn to lay on. Beginning from the ground or floor going up, these can be ten or twelve inches apart one above the other. Perhaps an illustration here will be of some help.

This illustrates just a part of a broom corn house with back wall removed; the roof, which is low pitch, is supposed to be sheet iron. a, a, a, a, a, are the studdings to the roof; c, c, c, are cross pieces, 1x4, nailed to the studdings about ten or twelve inches apart. These are intended for supports for your shelves d, d, d, d, which are set on the

your brush is shown here. It can be run by either hand or horse power.

Any man who has some mechanical turn about him can make some kind of cylinder scraper that will do the work very well, but those who are not so turned will find these machines ready for him when he needs one.

Now if you do not allow your corn to mold, but if it is allowed to cure properly it will be ready to bale in about three weeks or a little before, if you have exercised great care in the curing of it. Any good baling press will answer for this purpose. I prefer Whitman's Hand-power press with double speed power.

1. Separate all the crooked brush from the straight and bale separately.

2. If you have any damaged brush by mold or rain, do not put that inside with good on the outside, but bale it to itself.

3. Take a small armful only at a time, and butt it good on stem end on a board in order to even it; then lay it in the bottom of your baler, stem outside and brush inside. Then take another small armful in the same way and lay it in the other end of your baler, stem outside, with the brush inside lapping over the other, and so on repeating the operation till you have reached the top. Then place on the top section of baler, and wind down as tightly as you can. Then throw the machine open and tie your bale with No. 9 wire. Then your corn is ready for the market.

I would ask of all the readers of TEXAS FARM AND RANCH who are raising broom corn this year to send me a letter stating how many acres planted and how many bales raised from the same. This will be thankfully received. Grand Prairie, Texas.

Mr. W. Field, M. P., and President of the British Federation of Meat Traders, in a recent speech before the London Chamber of Commerce on the subject of American meats, said: "They welcomed the importation of American meat; they had no desire to limit it. [Cheers.] They would even welcome the live cattle for the benefit of the graziers. [Cheers.] But they had a strong feeling against placing the interests of the whole trade, and of the food supply of the metropolis and the country, in the hands of those who were confederated for their own advantage. [Cheers.] The exporters were already dictating to the trade and seeking to control from Chicago the markets of London, for they adopted the system of what a great statesman had called "exclusive dealing" so as to coerce other people into refusing to give the allowance which they refused to give themselves. In America the small trader had been crushed out, and now the monopolists had begun to try and crush out each other. [Cheers.] They in London preferred the old English system of dealing freely and fairly with the public, and all those who were dependent upon the meat supply of the country." Thus it seems our enterprising American monopolists are not content with the conquest of America, but want to extend their conquering dollars to Europe, beginning with the outlying islands of Great Britain. But the stubborn British will not submit without a bloody blooming rumpus, don't you know.

SOME ITEMS.

N. J. SHEPHERD.

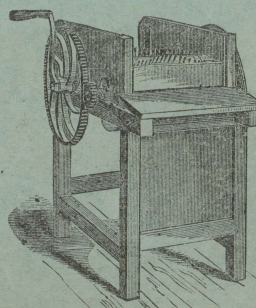
With nearly all stock when everybody wants to sell then is the time to buy, and when everybody wants to buy then is the time to sell. Some farmers get rich out of the ups and downs of different kinds of farm stock while others get poor.

With some men crossing means grading up because only pure bred males are used, but no very considerable permanent improvement can be secured with a single cross. The selection and breeding must be followed up, using a pure bred male all the time.

It is an exceptional case when it can be considered desirable or best to fatten a hog during July and August. Feed so as to keep in a good thrifty condition. Make as comfortable as possible, but do not undertake to fatten until the weather begins to get cool. There is too much risk of loss.

Selecting a brood sow is no small matter, and plenty of time should be taken. In fact, the more carefully the different sows in the herd are studied, and the more carefully the selection is made, the more certain a desirable animal will be secured. For breeding especially, it always pays to pick out the best.

Generally, it will be best to allow the sow to wean her pigs when she gets



CYLINDER SCRAPING MACHINE.

would begrudge that plant even a square foot of ground? The best and cheapest way that I know of to get your plants six or eight inches by one is to set your plants three by five feet and cultivate both ways, and keep all blossoms and runners off the plants until they are well established, good, strong plants, and then only let four runners form on each plant. Train the first two runners lengthwise of the row, so that you will have a single row of plants one foot apart in the rows, and the rows five feet apart, then let each plant make two more runners, and then train at right angles of the row, and let each one of these runners make two plants, and keep all the balance of the runners pulled off.

This will insure you some very large fine plants that will bear berries in piles, instead of a few little stunted berries, as we often see in matted rows where the plants stand not over an inch apart. The greatest mistake that I have made has been in allowing plants to mat too closely, but I intend to thin heroically in the future, and I expect that every cent that I spend on my patch will be doubly repaid me in fine large berries that will sell at the very highest market price.

HARDINESS OF THE TRIFOLIATA.

Florida Fruit Grower.

In conversation with Mr. Geo. L. Taber, of Glen St. Mary, he stated to us that young orange trees budded on trifoliata stocks perished alike with all others in the February freeze. That is, they died down to the surface of the ground banked up around them. He makes a practice of running a furrow on each side of his nursery rows in the fall, throwing the earth toward the trees and covering the bud a few inches above the junction. As above noted, the buds on the trifoliata stock were frozen to the ground, but there the frost stopped, while with those on sweet stocks it killed them down into the ground, so that many of them perished below the bud. As a result of this he now has about 30,000 buds on trifoliata stock growing vigorously with hardly a break in the rows, while the buds on sweet stock will have to be mostly renewed.

EFFECT OF FERTILIZING ON PEARS.

California Cultivator.

No fruits respond so readily to good fertilizing as pears, and where old varieties seem to be running out a new lease of life is given to them by applying ground bone and potash. Without doubt, these are the two essential constituents of the soil that the pear trees exhaust, and when they can no longer draw them from their surroundings they refuse to produce salable fruits. After many years of experience I can safely say that all of the pear trees of an old orchard can be revived almost beyond recognition by the annual application of potash and ground bone. The process I have found the most serviceable is to apply about 400 pounds of muriate of potash with 800 pounds of ground bone per acre each year. One-half of this mixture is applied in the fall, and the other half in the spring at plowing time. Crimson clover seed is sown with the fertilizer in order to give the necessary nitrogen. This repeated years in succession brings the orchard up to a condition where excellent crops of pears can be depended upon every season.

Lately many of our standard pears have been degenerating, and even upon good soil they fail to produce the paying crops that they should. The fruits are small, tasteless, and apt to be knotty and poor generally. Our fall fruits are unusually poor and insipid, and if better pears could be produced at this time of the year there would be a better general demand. Our fall and winter pears are susceptible of higher and more delicious flavors if we only give them the right cultivation and fertilization. The comparative difference between the fruits of the same variety of pears taken from two orchards is sufficient to convince one of the truth of this remark. Not a few are so poor that one can hardly believe that they came from the same stock as the other delicious specimens plucked from trees that have been fertilized for several years. Herein lies the difference.

It is a crying need of the times that orchardists should get out of the old rut, and educate the public up to a love for better fruits. In this way the consumption will increase. We can only do this by abandoning the idea that apple, pear and other orchard trees will take care of themselves. They will not, and never did, properly. They need cultivation and fertilization just as truly

as do the vegetable, grain or other farm products. Fruit growing requires as much scientific study as grain growing or cattle breeding, and the sooner this is generally recognized the better it will be for the industry.

GROWING GRAPES

Nebraska Farmer.

Two million dollars lost in fruit in one county in New York through the late visit paid that fine grape growing region by Jack Frost. Well that is a pretty big story and perhaps it is all too true in one sense, but out in the wild west we have long since learned not to count our chickens at the time we deposit the eggs in the incubator. A crop is not a crop until it is matured and ready for consumption. A possibility of a crop is a thing that often goes glimmering before our gaze, and we just simply grin and bear it as a part of the inevitable. Storms, floods, fire, frost and drought are considerations to be taken into account in reckoning the risks attaching to any business.

Some of our friends up in the Empire state will have no use for bottoms in their grape baskets this year, but no doubt their cellars are pretty well stocked up with grape juice now. But this is what comes of putting all of one's eggs into one basket. It is a nice thing of course to be handy to market and no doubt this fact has had much to do with marring that industry in one small section. When things do go wrong they go with a vengeance. Why would it not be better sense and better policy all round to boom the grape growing business throughout all the states where its culture is found profitable? In this way the crop is much more likely to sustain a fair equilibrium one year with another. There is no better field for grape culture today than Nebraska affords. It has been demonstrated so.

HORTICULTURE AS A BUSINESS

Farm News.

There has never been a time when the outlook for horticulture as a business was better than it is at present. The people of this country are rapidly appreciating the fact that fruit as a food is not only wholesome but nutritious, and it has become an indispensable adjunct to almost every table in the land. This is well for the consumption of fruit is to be encouraged in every way, as being beneficial to the health of the people.

The man who engages in fruit growing now is sure of a market price that will pay him well for the time devoted to it. There has never been a time when a crop of fruit did not pay well for all its cost, and now that science has come to the aid of the fruit grower and taught him how to combat disease and the ravages of insects he is more certain of a crop than ever before.

The old way of setting trees and letting them care for themselves is a thing of the past and progressive men realize that fruit trees require attention as well as any other crop. Orchards are to be furnished with the proper plant food, and the soil kept under cultivation. The same as if it were in a crop that can be grown in a year. The day of large orchards is passing, except where large companies have them, and the day of extensive fruit growing is at hand.

The small orchard which is given the very best care is to be preferred by the average farmer, rather than the large one which cannot be given proper attention.

Let the man who sets an orchard now attend to the location and select those varieties that have proven best in his section and success will crown his efforts every time. There is no need to experiment on a large scale as there once was when no one knew just what to select. The experiment stations have all been doing work along this line and the results are open for any one who inquires, and there is no excuse for not knowing just what to plant in almost any state and what the lay of the land should be for the best results.

Those who have good orchards are reaping good profit from them and those who set others in the near future may rest assured that the demand will keep ahead of the supply for a good many years.

SPRAYING VS THE BIRDS.

R. M. KELLLOGG, in Farm, Field and Fireside.

A large elm tree reaches up to the windows of our Iowa sanatorium, and we have spent an hour watching the little birds hopping along through its branches, scanning every piece of bark and crevice in search of eggs and the

larvae of insects. Every minute or so their sharp little eyes would make a "find," and then they enjoy a feast.

Several years ago the robins and other birds were very thick on our farm and wasted our berries until they stirred up our wicked heart, and the shotguns were brought out and used freely.

It has required several years to work up courage to make a public confession of having committed so heinous a crime, and we would hardly do it now were it not for the conviction that while the slaughter then was in a sort of retail way, it is now becoming wholesale and universal.

Who has not noticed the disappearance of the little birds from our fields and berry bushes? Surely our little friends are leaving us, and not only they, but many of our insect friends who daily feast on the insects that destroy the products of our labor. The diligent and untiring search of these little birds in the old elm set us to thinking whether or not we were not poisoning more of our friends than enemies. Surely it is there is a rapid increase of noxious insects, and the time is already here when the chances for a paying crop hang very largely on the thoroughness with which we spread the deadly poison over the foliage of trees, vines, bushes and plants. Nothing escapes; everything has its enemies. It cannot be denied that the precious little songsters that so delight us are eating the poisoned insects, and picking it up on foliage and bark and are rapidly being sent "where the good birds go," and we turn longingly to the chemists and inquire if something cannot be produced that will kill the insects and spare our feathered friends.

Who is prepared to say the clover insects, scale and weevil, and a long list of injurious insects once unknown to us, but now so general, are not the direct result of this wholesale distribution of poison?

We cannot stop spraying now. We have gone too far. The whole country is being denuded of these little "soul charmers," and what they formerly so gladly and freely did for us (so much better than we can possibly do), we must now do for ourselves.

Cannot our experiment stations inaugurate a series of extensive experiments that shall result in the production of some insect exterminator that will accomplish this result and restore the equilibrium of birds and carnivorous insects which shall hold in check the borers as well as root and leaf eating bugs and worms?

Professor Cummings says: "Immense stores of wealth lie concealed beneath the soil of Texas only waiting to be developed and utilized. There are 30,000 men employed in Russian copper mines far less valuable than some of the mines of Texas. Silver ore in good paying quantities exists in several localities in the State and iron ore is unsurpassed. We have sand and every other ingredient necessary to make good glass, and all that is needed is for some one to go ahead and make it. The asphalt beds of the State are very fine, being almost exactly the same quality as is used in paving the streets of Paris, France. Texas has everything necessary to insure prosperity, and with proper encouragement capital will come here, develop our resources and make this State the envy of the world."

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A MONTH FOR NOTHING.

A letter from the office of Colman's Rural World, the great agricultural, stock and horticultural paper, founded by Hon. Norman J. Colman, Cleveland's first Secretary of Agriculture and published by his son, Chalmers D. Colman, at St. Louis, Mo., says: "Any present subscriber to TEXAS FARM AND RANCH who will send his name and address to this office, 705 Olive street, St. Louis, shall have the 'Rural World' sent to him one month free."

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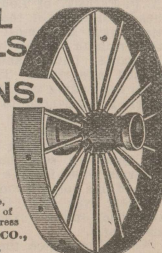
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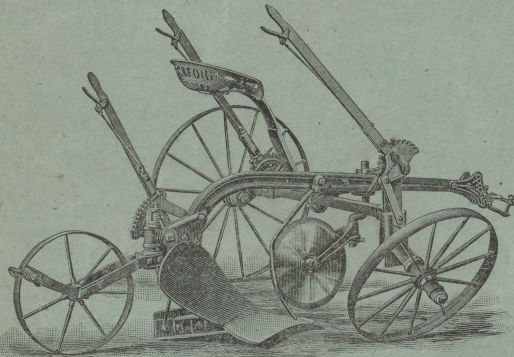
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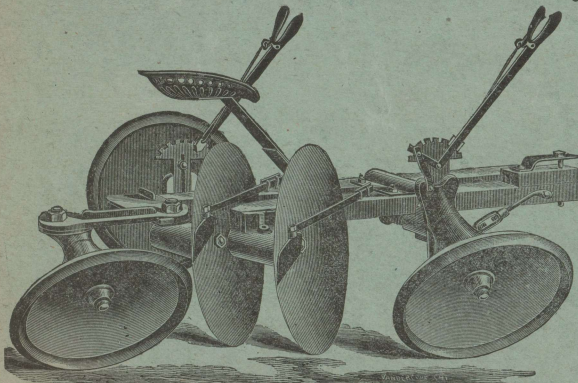
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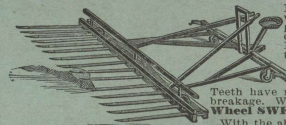
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