

LIVE STOCK

BEEF SPECIMENS.

A Hornless Shorthorn Bull and a Prize Shorthorn Heifer.

The matter of breeding polled Shorthorns was taken up a number of years ago by intelligent stockmen in various parts of the country. The result has been satisfactory. There are now sev-

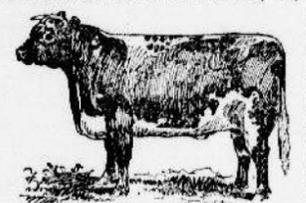


POLLED SHORTHORN BULL.

eral herds of polled Shorthorns, sometimes called Durhams, in the country. The illustrations show one of the finest bulls of this family. He is owned in Ohio at Tippecanoe City.

Several cow generations ago Mr. W. S. Miller, an Ohio man, began breeding a race of polled Shorthorns. He bred pedigreed bulls upon native milky cows. When the resulting progeny was hornless, it was carefully preserved and bred. In this way the herd grew both in quality and number.

About the same time in Minnesota a roan Shorthorn heifer calf appeared that had the nearest knobs for horns. She was bred with the utmost care, and three of her calves were entirely hornless. Two were heifers, and one was a bull. Some of her calves were bought by the Ohio man, and the bull in the picture is descended from one of these. He weighs over a ton and is a noble specimen of beef blood. There is no doubt that cattle and their owners, too,



PRIZE SHORTHORN HEIFER.

would be better off if horns were bred off them. In case of the beef breeds it would not take so many generations to do this.

The second illustration is reproduced from The Breeder's Gazette. It represents the champion yearling Shorthorn heifer at the Illinois state fair.

This is a Kentucky Shorthorn from the blue grass country. In her way she is almost as handsome as the blue grass girls.

Horseshoeing in Winter.

Shoes at this season are required to discharge a double duty—to afford foothold as well as to guard against undue wear. Mr. William Dickson in the United States government report on the horse says on this subject: Various patterns of shoes have from time to time been invented to meet this dual requirement, but the commonest of all, fashioned with toe and heel calks or calkins, is, faulty though it be, probably, all things considered, the one which best suits the requirements of the case. It should, however, never be lost sight of that the shorter, the sharper and the smaller these calkins are, so long as they answer the purpose which called them into existence, so much the better for the foot that wears them.

I have had particular stress on this subject, as I am of the opinion that the presence of the navicular disease—a dire malady from which horses used for agricultural labor should enjoy a practical immunity—is traceable largely to the habitual use during our long winter months of the needlessly large calkins, only fractional parts of which find lodgment in the earth or ice during progression.

I will explain what I mean. When a horse is shod with the exaggerated calkins to which I have alluded, the toe and heel calks are, or ought to be, the same height to start with, at all events. Very often, however, they are not, and even when they are the toe calk wears down on animals used for draft purposes far more rapidly than its fellow at the heel. The result is that the toe is depressed while the heel is unnaturally raised.

High calkins, while they confer no firmer foothold, are potent means of inflicting injury both on the foot itself and the superincumbent limb at large. It is only from that portion of the catch which enters the ground surface that the horse derives any benefit in the shape of foothold, and it must be apparent to the nearest capacity that long calkins, which do not penetrate the hard, uneven ground, are so many levers put into the animal's possession to enable it not to compel him to wring his feet, rack his limbs and inflict untold tortures on himself.

The relative position of the bony structure within the foot in relation to the navicular bone, which is not one of the weight bearing bones, is brought within the angle of incidence of both weight and concussion, influences which it should withstand, and which its structure precludes its sustaining without injury. The bone becomes first bruised and then diseased. The tendon to which it was intended it should act as a pulley, which passes over and is in constant contact with it, before long also becomes implicated, and what is technically known as navicular arthritis is thus engendered and developed.—Post-Dispatch.

February and March are good months for the hatching of eggs to come.

THE MORGAN BLOOD.

Present Day Trotters Owe Much to Their Racial Quality to It. Last year the get of Director won 38 races and the get of Robert McGregor 36. No other stallion figured in this class, the nearest to them reaching only 29, which amounts to a distance. One great performer means much for a sire, but a lot of race winners means more, and when two stallions leading all others in this respect have the same blood lines it becomes especially significant. Hambletonian and American Star constitute the winning combination and promise now to lead in 1894. Almost every day of trotting develops a winner for them, with positions slightly reversed from last year, as the big horse is now in the lead. This would not be the case if the greatest trotter ever foaled—Directum—had not been idle.

The Hambletonian blood, common to these leading race horse sires is well established in its origin and in the male line beyond dispute, but the American Star blood has been the subject of much investigation, with small result until Joseph Battell undertook the job. The evidence which he presents in the recently published first volume of The Morgan Register makes a very strong showing in favor of writing the pedigree in future as follows: "American Star (Seeley's), chestnut or sorrel, with star, hind feet white, 15 1/2 hands, 1,650 pounds; foaled 1887; bred by Henry H. Berry, Pompton Plains, N. J.; got by Coburn's American Star, son of Cook of the Rock, by Sherman Morgan; dam bay, stripes in face, about 16 hands, a used up stage mare purchased in New York city by Mr. Berry at an early price to work in team; breeding entirely unknown."

Mr. Battell traces the horse through the hands of eight different owners back to his breeder, not only giving the name and residence of each owner, but he gives the prices paid, where the horse stood, number of mares served and foals got each year, with fee, pedigree advertised and voluminous statements from owners, neighbors and their descendants. Everything is printed, nothing suppressed. To patiently gather all of this evidence required travel, labor and money. Reaching the breeder of Seeley's American Star, Mr. Battell diligently sought for living members of his family and neighbors who had personal knowledge, not hearsay, of the facts. Having proved the sire to be Coburn's American Star, he pursued like methods with this horse; finds after several years' search two married daughters of Ira Coburn, one in New York and one in Massachusetts, besides neighbors who knew the horse. In addition, he delved into old publications, court records and similar documents, getting corroborative evidence sufficient to make Seeley's American Star a Morgan.

The racing quality in Pamlico, in Dandy Jim, in Lord Clinton, in Dexter, Director, Directum, Direct, Robert McGregor and Nabkins all had a common origin. I mean that superlative racing quality that makes a great and lasting winner of races. It is the Morgan blood that has come to light in this the Morgan year. There are fast horses without it in plenty, but they do not rank with the greatest winning campaigners. It requires the Morgan blood to reach that pinnacle, and every lover of the Morgans should read Battell's careful record of his labor and investigations that "the king might have his own."—M. T. G. in Breeder's Gazette.

Big Steer.

A Canadian bullock, which is considered to be the largest ever hatched in Great Britain, was sold at Glasgow in July for the handsome price of \$142. The animal was a cross bred Shorthorn and came from the province of Ontario. It stood 17 hands high and measured 8 feet from the crown of the head to the tail, while its gross weight was slightly over a ton. The price is considered to be the highest ever realized in that country for a Canadian bullock. Last year the highest prices realized at Glasgow were \$140 for a bullock and \$130 for a bull.

Live Stock Points.

The kerosene emulsion will rid live stock of fleas and lice. An ounce of sugar of lead dissolved in a quart of water and rubbed carefully in three times a day will take away swelled lumps on horses' bodies.

Bill Nye is dead against docking horses' tails, which is a credit to both his head and heart.

Cattle are scarce in Texas this fall. Was it because the Texans have been raising so much politics?

The beef cow is round, smooth and compact. The dairy cow is sharp and pointy, with a big udder. You can usually tell at a glance whether a heifer will make a good milker. If she is big, long legged and wild looking, with only an embryo udder, beef her. Heifer beef now frequently brings a higher price than steer beef.

Every farmer ought to have a feed grinder, especially now when so much wheat is fed. For a small amount of stock a two horse sweep grinder will answer the purpose.

In years horses have not sold so low as they have done this fall everywhere. Even the trotting stock sales in Kentucky were a failure. The best horses to breed at present are carriage and draft.

At an agricultural show in Scotland farmers grieved on the dressed weight of a live bullock. He was then weighed fasting and stilled. His dressed weight when cold was 395, per cent of the live weight, showing him to have been a good one. Thirty-three farmers out of 29 underestimated the weight, and their average was 75 pounds below the results shown on the scales.

There is now a National Morgan Horse Breeders' association, and its first annual meeting was lately held in Chicago. Give the Morgans a chance and breed them for size. If they cannot then hold their own even with the fashionable hackneys, we may our guess.

FARM FIELD AND GARDEN

GERMINATION OF SEEDS.

Some Seeds Sprout Several Times—Wheat Leads the List of Seeds to Regenerate.

It is not generally known perhaps that many seeds will germinate not once merely, but several times, if the process be interrupted. How often the various seeds used in farming will, when germination is arrested, pluck up courage and renew the work when favorable conditions are restored has not been the subject of very extended investigation. Professor Goff, when connected with the New York agricultural experiment station, some 10 or 12 years ago, did some interesting work in this line, and Dr. Beal of the Michigan Agricultural college also investigated the subject to some extent in the early eighties. More extensive work has later been done by the University of Wisconsin.

These various tests have made it appear that there is a great difference in the power of different kinds of seeds to regenerate. Wheat leads the list in the experiments reported from the Wisconsin station and is strongest in the number of times it will pick up again, it having germinated no less than 14 times, with 101 days' drying in the intervals between these several germinations. Corn germinated six times with 35 days' drying, radishes five times with 28 days' drying; parsnips and carrots germinated barely twice, giving a very small percentage the second time, while celery and pansy and timothy germinated but once, and clover had but a very small percentage of germination after the first one. The practical bearing of these facts is that they account for the frequent failure to dry a "catch" of grass or clover in a dry season. If either timothy or clover starts to germinate and the germination is arrested from any cause, it will not be resumed, even though the most favorable conditions should follow. It is otherwise with wheat, and even with corn, though with a less extent than the wheat.

The method by which the growth is renewed is deserving of notice. In case of grain and corn, the descending axis usually dies, while the ascending axis resumes growth, throwing out rootlets from itself. With buckwheat, however, and with all the garden seeds tested the descending axis retains its vitality and resumes growth, although the extreme end of the radicle is generally killed by the drying. The upper part usually lengthens, the radicle swells up at its lower end and finally develops a number of rootlets. In the case of the cucumber and melon, rootlets often develop when the descending axis has been entirely destroyed, from the base of the cotyledons or seed leaves.

What to Do For Roup.

There is no disease more dreaded or more fatal among fowls than the roup. Here are the opinions of several well known poultry men on the subject as expressed in letters to Rural New Yorker. James Rankin says: Roup in its advanced stages is very contagious, as offensive mucus is constantly running from the nostrils and mingling with the drinking water. I would advise isolating the affected birds and treating their drinking water with Douglas' mixture. I would mix ginger in their soft food and bathe the heads, nostrils and throats with kerosene, using a feather. This treatment will almost always effect a cure.

James H. Seely writes: If the trouble is merely a cold which is likely to lead to roup, use cod oil in the drinking water and inject a weak solution of peroxide of hydrogen in the nose and throat. But if a bad case, and it has settled down into roup, the best and only safe remedy is the hatchet, for if doctored up and made to get apparently well at the first five cold it is ten times worse. Affected birds never make healthy hens.

P. H. Jacobs believes in destroying all very sick birds, disinfecting the house and yards, and adding a teaspoonful of liquid carbolic acid to every gallon of drinking water for the well birds.

On the first appearance of a cold P. Williams advised feeding once a day soft food with ginger in it and disinfecting the house and quarters by sprinkling with carbolic acid. Separate the sick birds from the flock and bathe all that have swelled heads and running nostrils with camphorated oil and inject it in the nostrils.

Improved Potato Culture.

The argument that improved potato culture always leaves the soil improved and increases the fertility of the farm is an old story to those who have used large quantities of chemical fertilizers in connection with potato growing. The rotation of potatoes, wheat, grass two years and corn, which Rural New Yorker has so often described, is an admirable one for the potato grower. All the stable manure is put on the corn and all the fertilizer on the potatoes. The latter crop, one year with another, will pay a profit on the whole farm operation, while the dressing of fertilizer is so heavy that it supplies ample plant food for the succeeding grain and grass. This is not mere theory, but a fact which has been worked out on hundreds of farms. The heavy crops of grass and grain which grow after the potatoes are the strongest possible arguments that good fertilizers are not "used up" by the first crop.

Best Sugar Association.

The American Beet Sugar Producers' association held its annual meeting at San Francisco Oct. 15 and elected the following officers: President, Henry E. Oxnard, Grand Island, Neb.; vice president, Thomas E. Collier, Lehigh, U. T.; secretary, James Coffin, San Francisco. Resolutions were adopted denouncing the enactment of a tariff law antagonistic to the sugar producing interests of America.

POINTS IN IRRIGATION.

The Influence on Soils—Important Considerations.

Too much water or too little is an important consideration in irrigation. But if conditions in this respect are favorable there remain yet other obstacles to success and many illusions to be discarded. It is a common idea that the irrigated farm always remains in its state of virgin fertility, kept so by the deposits of rich sediment during the process of irrigation. In this connection Frank L. Watrous of Colorado writes as follows in The American Agriculturist: No doubt there are certain times in the season when there is sufficient alluvial matter in the river waters to add somewhat to the quality of the soil on which it is deposited. I think this is true of the streams of northern Colorado and Wyoming, which are usually clear, but in time of freshets receive the wash from the mountain sides that is quite rich in potash. In other portions of irrigated districts the waters do carry during several months in the year very heavy sediments, which are deposited on the fields, but in many or perhaps most cases they do as much harm mechanically as they do good chemically, and it is safe to say that generally these deposits have no noticeable effect in prolonging the fertility of soils.

It may not be generally admitted, but it is a fact nevertheless, that irrigated lands become depleted under steady cropping, and unless kept up by some system of rotation or manuring, become unprofitable. Irrigation does not keep up soil fertility. It may assist the process, but, on the other hand, if not intelligently used, it is a prolific cause of soil deterioration and not infrequently complete sterility. The soil irrigated from the Cañon La Poudre river produced 30 to 50 bushels of wheat per acre in the pioneer days, but now, three decades later, is 15 to 20 bushels in the average. We raise fine potatoes here now, but get nothing like the big yields that were common before 1870 unless the land in the meantime has been highly manured.

There is a point of co-operative sympathy between soil and water. The highest art of the irrigation farmer is to have learned the needs of his soil, to know where cultivation should leave off and irrigation begin and to know not so much the exact number of inches of water it takes to irrigate an acre, but the condition which his particular soil should be in when it has been watered sufficiently. It is beyond the science of figures to determine the amount of water a plant needs on various soils. The farmer may by close and intelligent study of plants and their requirements determine very closely when sufficient irrigation has been given.

The prevailing fault with amateur irrigators and to a large number of those who have had experience is the application of too much water. An excessive dilution of the soil separates its particles and produces an approach to a mortar bed that settles down tight when dry, shutting out the air, causing evaporation to increase and producing finally a hard dry surface, crusted over, which chokes plants, causes them to turn yellow and perhaps die. This method persisted in for a few years will bring the richest soil to a condition which will support no vegetation more valuable than poverty weed.

Intelligently applied irrigation is the most valuable factor in bringing up and keeping up the productiveness of land. It aids in bringing soils into proper condition to receive manure, and it afterward aids in dissolving the manure at the right time, getting it in shape to be most conveniently available to plants.

Grind the Grain Feed.

The best authorities claim that practical feeding tests with corn, wheat, rye, barley and oats are proof enough that the best results cannot be had unless they are run through the farm mill. Many tests have been made of feeding wheat soaked in water, as well as whole, with the result of their passing with poor digestion.

Many experimenters with ground feed arrive at the same conclusion—viz, that the same number of pounds of grain fed in meal have uniformly made more pounds of flesh and fat than when fed whole. It is reasonable, says Professor Armistead, that if the digestive organs are taxed to perform the work of the mill in crushing the hard grain and releasing the nutrients from the woody fiber there must be so much waste of food tissue and waste of grains with which is often seen accompanied in the excrement of the animal. There are various forms of machinery on the market, designed to overcome this waste by chopping, splitting and grinding.

Odd Mentions.

Kansas' state board of agriculture says that of the \$1,471,523 business of winter and spring wheat raised in Kansas in 1903 there have been used as seed for farm animals 1,959,323 bushels, or 13.4 per cent. It is estimated that of wheat crop of 1904 there will be 10 to 15 per cent.

A new outlet for the sugar beet product is reported. Experiments have been made by a German and have reached a successful conclusion for the making of pure spirits from beet sugar molasses.

Every farmer in Kansas should write a postal card to Secretary Cabarr of the state board of agriculture, Topeka, asking for a copy of his report "Feeding Wheat to Farm Animals."

Barley, like wheat, rye and corn, has different varieties, classed as fall, winter and spring. Spring barley is mainly grown in the west and in the United States as a whole. Fall sown barley is most largely grown in Europe.

THE COLUMBUS HOSPITAL FAIR

It Opened Its Doors Last Thursday and Received a Very Liberal Patronage.

The Donkey Without a Tail Causes Hours of Laughter and Fun.

The Catholic fair for the benefit of the Columbus hospital opened up last Thursday at the Realty hall on Central avenue, and for the opening night the patronage was very good. The various booths were decked in all the glory of the colors of the rainbow, and few could resist the temptation laid before them by the charming ladies who have charge of the various booths to purchase the wares offered for sale.

The fancy-work booth is liberally stocked with all manner of needle-work and embroidery, from a pin cushion to a laundry bag, and the articles are not only artistic and useful but very reasonable in price.

The flower booth is a gorgeous mass of color, being composed of flowers, lamp shades and many other articles made of fancy colored tissue paper. The fish pond was liberally patronized, and the dining tables spread with dainties, which made them a irresistible attraction. The ice cream booth and the raffle booth were tastefully decorated and received their full share of patronage. A beautiful cake is offered as a prize to the one making the nearest guess at its weight. However, the source of the biggest fun was the donkey without a tail. He was drawn on a canvas of life size, and the candidate for honor was first shown the beast, then blindfolded and turned around several times and finally presented with a tail which he was required to pin on the donkey in the place where his tail ought to be. The result never failed to bring down the house. The ladies who have superintended the decoration of the hall are deserving of special praise for their artistic result.

THE HELENA SHARKS.

A Great Falls Man Gets the Worst of It and Would Like His Money Back.

Tom's lots at Castle are not generally considered of much value at present, and Henry F. Collett of Great Falls is anxious to get back what money he put in there some years ago. Consequently he has commenced suit in the district court of Lewis and Clarke against H. M. Parthen and other directors of the Castle Improvement company. He alleges that on January 31, 1891, the company conveyed to him for \$1,750 two lots in King's addition to Castle; also that the deed given protected him in the title to the land; that at that time the United States rightfully owned the property and the government lawfully took possession of it April 5, 1891. He claims that he never had legal possession. Collett further alleges that the Castle Land company failed to file reports of the condition of its capital stock and the amount of its indebtedness during the years 1891, 1892 and 1893, as required by law, and having so failed, that its directors became personally liable for the debts existing during that period. Collett asks judgment for the amount he paid for the lots with interest from January 31, 1891.—Nehart Miner.

A NEW ADDITION.

J. H. Johnson Files a Plat of University Addition on the West Side.

There has been a number of signs recently of a revival in the real estate market. The transfers of property recorded in the county clerk's office in the last two months have been more numerous than for some time past. Yesterday a new plat was filed with the county commissioners covering land in section 15, township 29 north, range 3 east, lying south of Sun river, which forms the northern boundary of the addition, and is located near the Sun river bridge and about half a mile from the Great Northern railroad shops. The property lies about a mile and a good view of the city. It is the intention of Mr. Johnson to sell lots at a low figure and on easy terms for workingmen's homes. The new addition comprises thirty-seven blocks. Mr. Johnson is a real estate man of energy and experience and he looks for a marked revival in real estate in Great Falls in the near future and an increase in values. With signs of material prosperity on every hand and a notable increase in population he believes that better times for real estate owners must result soon.

A VERY FISHY STORY.

Frank Murray, Arrested Yesterday for Forgery, Tells How It Happened.

A party giving his name as Frank Murray was arrested last Friday at train Brothers by the police, while trying to make a purchase of a few dollars' worth of goods with a forged check for \$2475, purporting to have been signed by James Straut. Mr. Straut, suspecting the check to be a forgery, held the man at the store while he went out and got an officer.

When questioned by Mr. Straut, as to where he got the check, he said he got it from a man named Twoby at Allen. He told the same story to the marshal, but last night had quite a different story to tell the county attorney, who interviewed him. According to the latest yarn, he received the check from a man named Frank Nye, whom he had never seen but twice before, and was told by Nye that if he would purchase a pair of overalls, a pair of socks, a suit of underwear and a pair of overshoes for him, and bring him back the change he would be rewarded with \$50 cents. He accordingly tried the Boston store, but they declined the check. Then he went to Nathan's, who also declined to cash it, but told him to go to the bank and

get cash, as the bank was just a block away and still open. Instead of doing this he went to Strain Bros. and tried to cash it there, with the result that he got arrested. He told the marshal that he was to meet the man who gave him the check at the beer hall corner, but no one was to be found there answering his description. The man claims to be a railroad man and to have worked on the section at Allen, Benton and other places. The police regard him as a crook, but not a very clever one, and think they have a clear case of forgery against him.

THE SUICIDE AT BENTON.

The Cause a Mystery—The Text of the Dead Man's Letter of Explanation.

The cause of the suicide of J. C. Anderson at Benton, the news of which was first published in yesterday morning's Tribune, will probably never be known. The River Press, which arrived here yesterday, after reciting the facts, about as printed in The Tribune, gives the text of his letter to the coroner as follows:

PORT BENTON, Dec. 11, 1894.

DEAR SIR: I request that you do not have held a post mortem examination over me. I believe the law does not require it, and if I am correct in this matter, you will please follow my request.

You can have considerable trouble by having the jury, if you have one, bring in or render the following verdict: "We, the jury, find that J. C. Anderson came to his death by a gunshot wound, presumably inflicted by himself."

Every man has secrets which the world is bound to respect; and why I have committed this deed would you and the public no good to know.

J. C. ANDERSON.

It then goes on to say:

"J. Ward Huse occupies a room in the same building, and going there after hearing of the suicide he found a bundle of letters, one to Rev. Clowes, another to Mr. Huse, and the remainder to parties at a distance. The letter to Mr. Huse directed him as to the mode of disposing of Anderson's effects. It also contained passes furnished Anderson by Chicago railway officials to Dayton, O., where he was to give testimony in a railroad case. With the letter was a request that Mr. Huse return the passes. All the papers were dated Dec. 11.

The conclusion is that after Wells, Huse, and the other lodgers in the building had gone to their work Anderson arose, cleaned up the room, dressed himself in a new black suit, deposited the bundle of letters in Huse's room, returned to his own locked door, and, lying down on the bed, ended his existence.

What caused the act will probably never be known. Surmises may be formed but there is no indication of a cause assigned. His roommate, Wells, states that Anderson was temperate, but that for several days past he has been quiet and morose.

Of Anderson's history all that is known is that which he has told his associates—that he was born in New York, his parents dying when he was very young, and that he was without brother or sister. He was about 27 years of age and unmarried.

A MISSING BOY.

Aug. Spooner, Jr., Who Was Last Friday Before the District Court East Friday Is Missing.

It is stated that August Spooner, Jr., who was released a few days ago under \$50 bail, and who was to appear in the district court and answer to a charge of stealing a baby carriage, is missing and his car was found last Friday floating in the river, from which it is thought by a few that he might have committed suicide. A more plausible explanation, however, is that he has jumped his bail rather than go to the reform school. His parents were much opposed to his being sent there and it is stated they would very much rather lose \$50 than have him sent to the school.

Young Spooner is about 12 years of age and is credited with being totally incorrigible by the police. He is the same boy who accidentally blew the top of his baby brother's head off with a shotgun last summer. The police have suspected him of a good many petty thefts.

CITY TAXES COLLECTED.

Less Than Six Per Cent Delinquent—Amounts of Special Taxes.

The county treasurer has given the city clerk a statement of the various amounts collected on the several special taxes, as well as the amount of general taxes, which reads as follows:

Table with 2 columns: Tax Type and Amount. Includes Delinquent taxes, General taxes, Special sewer tax, Special sidewalk tax, Special garbage tax.

Stickers Count.

In the contest between Messrs. J. H. Williams and D. F. Smith over the jurisdiction at Barker, the court decided in favor of Mr. Williams. On the point submitted, whether "stickers" with a printed X on them, should be counted the court held that they should. Also holding that where a candidate's name is written it is not necessary that there should be an X after it. This latter point is in favor of Smith, as several ballots thus cast in his favor were thrown out. It will now be necessary to recount the ballots and see whether Smith had enough of those to overcome Williams' majority as shown by the returns.—Nehart Miner.

Potatoes Wanted.

The Great Falls Produce company will pay cash for potatoes in any quantity.