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Sumner County Fair.

Special Correspondence KANSAS FARMER

The third annual exhibition was held at Wellington last week. The weather was unfavorable, but nevertheless the attendance was fair and the receipts sufficient to defray all expenses.

New halls, stalls and pens were erected this season to accommodate the displays, and were well filled with interesting and attractive exhibits. In the agricultural hall the most attractive displays were those of L. A. Simmonds, who had a tasty exhibit 100 varieties of cut flowers. The fruit exhibit was very good. Col. H. C. St. Clair, Belle Plaine, showed 35 varieties; A. G. Forney, Belle Plaine, 27 varieties; Jas. Holland, D. N. Gilbert, Hunnewell, 7 varieties; G. W. Bailey, Wellington, 20 varieties; Mr. Sommerville, Oxford, 19 varieties. The display contained mainly apples of an unusual and symmetrical development. A. G. Forney also had the premium corn and wheat. One of the most attractive and extensive displays in the hall was made by Col. H. C. St. Clair, who showed from his own farm six kinds of corn; also wheat, oats, rye, sorghum, hay, broom corn, wild and evergreen grass, castor beans, tobacco; also 12 kinds of forest timber, 7 kinds of fruit trees, 3 of strawberries, 3 of blackberries, and 3 of raspberries. He also exhibited a bunch of Texas honey-cane, grown on land that was inundated until June. The cane was 14 feet in length and yielded 40 tons per acre, which would make 400 gallons of sirup. The Texas tree bean which he showed he thinks equal to the white navy bean and a very sure and prolific Kansas crop, yielding 60 bushels per acre.

The Mohawk Valley broom corn raised by Albert Hill, Wellington, was a superior variety, the brush measuring 31 inches. A fine bunch of the Tennessee evergreen broom-corn was shown by W. Fulk.

In the sheep department Jno. Banks, Mulvane, showed some imported Cotswolds; H. C. Brown, Batavia, Ill., showed 56 Merinos; and Chas. Covell, Wellington, showed 10 Merinos.

Short-horns were represented by M. Barner, H. C. St. Clair, and John Widick, Belle Plaine; and H. B. Williams & Son, Caldwell. J. W. Hamilton, Wellington, showed a number of Galloway cattle, and John Staub, Wellington, exhibited a nice lot of Jerseys.

The sweepstakes were as follows: Best bull of any age or breed—1st, M. Barner; 2d, H. B. Williams & Son; best cow, any age or breed—1st, H. B. Williams & Son; 2d, J. Hastie; best bull and 5 of his calves—1st, H. B. Williams & Son; 2d, J. Widick; best herd—1st, H. B. Williams & Son; 2d, John Staub's Jerseys.

A very good exhibit of draft and agricultural horses were shown, mostly breeding stallions, either full blood or grade Norman and Clydesdale. R. M. Johnson showed his English draft stallion "Hartington," which he is breeding to 50 Texas pony mares.

The great feature of the fair was the fine exhibit of swine which probably has never been surpassed by any county or district fair in Kansas as to quality and numbers. The hogs were as well bred as the country affords, and not a poor animal was to be seen. The attraction reflected great credit to the enterprise and capital of the breeders as well as to thrifty Sumner county. Over 100 head of swine were shown. Poland Chinas were represented by S. V. Walton & Son,

and F. A. Hubbard, of Wellington, H. B. Williams & Son, Caldwell, and J. S. Whitman, Oxford. Berkshires by M. B. Keagy, T. A. Hubbard, Wellington, A. G. Forney, Belle Plaine, and J. M. McKee, Wellington.

A. G. Forney, showed 11 Berkshires and won first premium on aged boar, Rob Roy, bred by A. W. Rollins.

S. V. Walton & Son, Wellington, made a big show of 34 Poland Chinas and won six premiums. This herd is one of the noted herds of the state. His present herd, which was so successful at Topeka, consists of 100 head, mainly of his own breeding. For 22 years Mr. Walton has been engaged in handling this breed with marked success. At the State Fair he took 39 orders and at his own fair sold 12 pigs, and took in all 20 orders for future delivery. He has done much for the improvement of swine in Sumner county and deserves the success that he is meeting with as a breeder.

T. A. Hubbard, one of the retiring county officers, made a large exhibit of 35 Berkshires and Poland Chinas, and won five premiums on the Poland Chinas and five premiums on his Berkshires. This herd won sweepstakes as best herd, also 1st sweepstakes on sow and litter of pigs, and 2d sweepstakes on boar; also on sow. "Cora Victor," a Give or Take boar, heads his Poland Chinas, and "Dandy," bred by N. H. Gentry, Sedalia, Mo., heads the Berkshire herd. As Mr. Hubbard contemplates devoting his entire attention to the swine business, he has made some valuable acquisitions to his herd. At the State Fair he purchased from B. F. Dorsey & Son and from A. M. Fulford, Maryland. A sow and six pigs shown by Mr. Hubbard were the finest the writer ever saw on exhibition. Mr. Hubbard reported seven sales at the fair.

M. B. Keagy, the county treasurer, showed a remarkably fine herd of Berkshires which deserve special mention. The whole herd of 22 are from noted prize winning herds and includes "Sister B 2d," and "Fancy Fair," both imported from England last June. This pair alone cost him \$600. "Sister B. 2d" won first in class and sweepstakes, both at Bismarck and the State Fair, also first premium in class at Kansas City, Chicago and St. Louis, and was then received in time for the fair at Wellington and won sweepstakes as best sow. "Fancy Fair," the other imported sow, also won first premium in class at the above named points this season. "Wellington Duke," bred by N. H. Gentry, heads his herd. Mr. Keagy has been handling Berkshires for about 15 years, and now has just fairly started with a fine herd in Sumner county, which will rank second to none in the country. The herd won six class premiums and two sweepstake prizes at this fair.

The sweepstakes awards are as follows: Best boar any age or breed—1st, H. B. Williams & Son, Caldwell, Kas.; 2d, T. A. Hubbard. Best sow any age or breed—1st, K. B. Keagy; 2d, T. A. Hubbard; best collection of swine—1st, T. A. Hubbard; 2d, M. B. Keagy.

The writer predicts a big success for this fair association another year if the present managers have it in charge. H.

The Supreme Court of the United States has just decided that sections one and two of the Civil Rights Act are unconstitutional, except as they may be applied in the Territories and in the District of Columbia, where Congress has exclusive jurisdiction.

Mr. Swann's Weather Records.

Most of the present readers of the KANSAS FARMER know what is meant by "Swann's weather records." But our later subscribers may not be posted on the subject.

M. J. C. H. Swann, a farmer of Sedgwick county, Kansas, (P. O. Sedgwick, Harvey Co.) has been keeping a weather record more than forty years. He is now sixty-four years old, and a quarter of a century or more, he has been not only keeping up his current record, but, also, studying the record of past years. Some years ago he made up his mind that from what he had learned in this direction, he was able to deduce a certain rule which he could safely apply to weather in future, and thus govern his actions wisely in the matter of sowing and planting seeds. The more he experimented, and compared and studied seasons, climate and crops, the more positive he became in his opinions on the subject. He has been in the habit of consulting with and advising personal friends several years past, and his predictions have been verified. He has also written some for the press, and so far as we know, his calculations have been correct, in the main, at least, in every instance. In September, 1881, he wrote a communication for this paper, on the subject, and in that letter—(published Sept. 7, '81)—occurs this passage, referring to the next year—1882:

"Wheat will be the first grain that can be made available for man and beast, and grain of all kinds will be very scarce and high before another harvest comes; and as next wheat harvest (1882) is sure to be a good one, I want to see much wheat sown."

We all know that the Kansas harvest of 1882 was good, so that Mr. Swann's prediction was fulfilled.

In the next February he wrote another letter to the FARMER. It was published Feb. 15. In that letter he was writing about temperature, moisture, chintz bugs, etc., and then he says:

Now, what I think of the coming seven years, if they are not an exception to the past of this and other parts of the United States. * * * I will say this, that the bottom has been touched, and the rainfall will increase from year to year until 1884, and 1885, and bugs will go the other way up to that time. Then rainfall will recede and bugs will succeed, I fear, as usual.

Again, August 16, 1882, another of Mr. Swann's letters appeared in the FARMER, from which we extract the following:

Many of your readers doubtless remember my advertisement to post farmers one year ago for one dollar each. It cost me over two dollars and I never got my money back on it. But my article that was published in the August number, I believe (Sept. 7 is the correct date—Ed.) has settled the matter with the most skeptical wheat raiser in the state so far as this year's crop goes. And time will establish the future. And to every one who is fortunate enough to get the copy containing my last year's article and the present one will be in receipt of information that will be worth hundreds of dollars if practiced. In the two articles you have instructions if well studied to take you on to success when the hardened and twisted hand that has done this scribbling lies stiff and cold in death. * * * By sowing the greatest average in the fall of 1883, and when harvest is over in 1884, we will inscribe in letters of pure gold that Kansas leads but never follows in the production of wheat."

Mr. Swann claims to have learned from his records how to estimate the coming years. His book which we noticed a short time ago is entitled—"The Future by the Past," and in this book he gives a brief summary of weather records for many years, but specially ever since 1850, with forecasts for future years. Mr. S. is now selling his book. He will probably see many of our readers in

the next three to six months, and to them all we commend Mr. Swann and his book. We believe him to be honest; and even though one should doubt the establishment of his philosophy, he presents facts enough to make it worthy of trial, especially so when nothing can be lost by it. Any person may obtain the book from J. E. Sherrill, publisher, Indianapolis, Indiana, by sending the price 75 cents.

Kansas Report for September.

Secretary Sims, in his report for last month, says it was "a trying period on corn." In some portions of the State there was no rain during the month at all. What fell was in local showers. Corn yields are various and checkered. The extreme west-central counties have none. The average yield for the state is put at 40.9 bushels per acre. The falling off since the October estimate is about 16 million bushels for the State. The average yield per acre is put at 40.9 bushels, making a total product of 190,363,237, which is about 36 million bushels more than the crop of 1882.

Early potatoes did well; late varieties generally light. Sweet potatoes will average about 100 bushels per acre. Wherever potatoes, Irish or sweet, had good care and culture, returns have been good. Sorghum has done well. More than half the acreage was grown for feed.

Fruit has not done well; the apple crop is not better than 60 per cent. of a good crop, and that is the best among our fruits.

The Wool Market.

Sales have not recently held up as well as prices have. It may be assumed that October will not see so large a movement of wool as did September. W. C. Huston, Jr., & Co., of Philadelphia, under date of Oct. 10 say:

Since October 1st, there has been some falling off in the amount of sales, but prices remain very firm. The current business, however, is of quite satisfactory proportions, and the decrease is only natural after the late large transactions, during which manufacturers added considerably to their stocks. Offerings by eastern houses are much reduced; and this, combined with the indifference of sellers, has also tended to somewhat restrict business.

Philadelphia prices for Kansas wools are quoted as follows: Fine, 21a23; medium clothing, 25a28; quarter blood clothing, 21a22; com. and clotted clothing (run out Cotswold) 17a18; black and burry, 18a20; medium combing, 30a30; quarter blood combing, 25a26; common combing (long, coarse-haired Cotswold), 20a21.

The aim of the gardener ought to be to keep the currant bush with no branches older than two years, and so as to make this fruit give the best returns, when it is in full maturity, to enclose it carefully and entirely with dry straw; thus imprisoning the leaves will fall on account of the exclusion of air and light, but the fruit keeps perfectly fresh to the end of October, when it can be sold at higher prices.

An Indiana farmer reports to his home Farmer that his 1,500 currant bushes with almost no culture, netted him at the rate of \$100 per acre, which he considers sufficiently encouraging to warrant trimming and cultivating for another season, hoping to do better.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

October 24 a. d. 25—Theo. Bates, Higginville, Mo.
November 1—Bagsdale & Garland's joint sale at Kansas City, Mo.
November 1 and 2—H. H. Lackey & Son, Peabody, Kas.
November 14—W. S. White, Sabetha, Kas.
November 18—Earl & Stuart, Herefords, at Kansas City.
November 1 to 8—Polled cattle sales at Kansas City, Mo.
November 29 and 31—Joshua Barton and J. F. Barbee, Millersburg, Ky.

March 1, 1884—J. C. Hyde, Wichita, Kas.
May 27, '84—J. C. Stone, Leavenworth.
May 28 and 29, '84—N. E. Ward & Son, Kansas City.
May 30 '84—W. T. Harne, Lee's Summit, Mo.

Good Lungs in Horses.

A writer in the National Live Stock Journal takes up a subject of great importance—the lungs. In reference to horses, he says:

No matter how great his stature, or how heavy his muscle, if he is deficient in lung power, he will be like a locomotive having very large and heavy driving wheels, surmounted with a disproportionately small boiler; the wheels and shaft sufficient for a train of thirty loaded cars, while steam for moving half the number is all the boiler can generate. A horse of ten hundred, having full lung development, and withal well muscled, will move a given load to a greater distance in a specified time than a horse with a fifth more size, but having a scant lung surface. Bulk and heavy muscles, out of proportion to the lung capacity, is a direct detriment, for reasons which we will give further on.

The horse does not get his re-invigoration, as is commonly supposed, directly and at once from the air he breathes, but on the other hand, the renewal of vigor comes through the rapid change wrought upon the blood by its contact with the air in the delicate lung tissue. The air as such, gives no tone or impetus to the muscles through the act of breathing, but forty times in a minute the heart sends the venous blood, deprived of its valuable properties by reason of having left these in the remote tissues, muscular and otherwise, where needed, to the lungs, where, instantly as it were, it is aerated, goes back to the heart, and again, forty times a minute in the horse, and nearly twice that frequently in the human subject, the heart sends the oxygenated blood to the brain, muscles, and all other tissues, and it is upon reaching its destination that the horse receives the benefit of the lung capacity he possesses, and not before.

No one need wonder at this when thinking of the running or trotting horse, because before he begins the heat he receives very active exercise that brings this aeration and distribution of blood to the muscles and brain into active play, and, with each inspiration while engaged in the heat, these processes go on with increased vigor. Increased by reason of the circulation and respiration being quickened under the violent exertion, while at the same time the lungs are, at every inspiration, expanded to their utmost capacity, thus exposing more blood to be changed—oxygenated by contact with the air, which rushes in from without. The aeration of the blood answers, in the horse, the same end that is reached in the steam engine by the generation of steam in the boiler. By bearing these points in mind, it will readily be seen to what a degree the horse is dependent for a vigorous constitution upon his lung surface; and how nearly the measure of the latter indicates the strength of the former.

Even the brain power is dependent upon the faithfulness with which the lungs do their work. For if re-invigorated blood fails to reach the brain with each pulsation of the heart, syncope, or fainting, follows. The horse has neither courage or constitution without brain force, and this depends, in the manner

stated, upon the power of the lungs. The chest, therefore, should be capacious, one form being essential to the speed horse, while a different form properly belongs to the draft horse. Such a formation as will enable the horse to greatly increase the lung surface; while under a high rate of speed, is essential to the horse kept for rapid work. The round, barrel-ribbed horse cannot materially increase the space within, even under exertion; but the long ribs, in oval form, can, when spread apart during excited respiration, take in an immense volume of air, giving, in the way stated, an increased capacity for speed and endurance.

Another concomitant of full lung capacity giving evidence of constitution, is the ability to stand cold. The horse with small lungs arches his spine and droops, when in a low temperature, not merely because he takes less air into the lungs, as such, but because the vitality of all the tissues stands low if the blood, fully re-invigorated in the lungs, fails to be supplied to the surface and limbs—the parts, in other words, that are exposed to cold. All thoroughly intelligent horsemen know that the draft horse may have a round barrel, thus enabling him to aerate a uniform amount of blood, or nearly so, whether at work or rest. This is proper for two reasons, namely: (1), His exertions are generally made with steadiness and moderation, hence at no time imposing the violent changes that are put upon the speed horse; (2), The modern draft-horse, with a weight of 1,400 to 1,800 pounds, requires a large and steady distribution of blood to the tissues, that this great substance may be built up while growing, and the natural wear and tear suitably maintained after full maturity is reached.

There is scarcely a liability that any creature will have too much lung surface. It is easy to see how a large body, full of blood, having within it a large heart and small lungs, could have blood enough sent to the lungs to disturb, and even, in a measure, to suspend their action. The expansion and contraction of the lungs depending on the in-going and out-coming of a large volume of air, the aeration of the blood, through too large a quantity of this pressing upon the delicate walls of the cells, might, and sometimes does, result in hemorrhage. This explains why hemorrhage from the lungs occurs in persons and animals while under violent exertion, and is a further illustration of the fact that it is better to have a surplus of lung power, a reserve force to be called upon as needed, because this is a quality that can lie latent without harm, whereas a deficiency is continually injurious.

Stock in the Fall.

This time in the year is of special importance to every person interested in raising stock, for the reason that, in addition to the fact that grass is not good and fall pastures generally short, winter is near at hand when, unless stock is well handled, it must lose in flesh and possibly in value. The cold season, everybody understands, is the hardest season on all kinds of animals, just as it is on men, unless such preparation has been made as to reduce effects of the season to the lowest possible limit. This fruitful preparation includes more than shelter from the cold winds when they come, and bins and mows filled with feed. It includes good care in the fall.

Every person of ordinary observation has noticed a difference between cattle in certain conditions of growth or health in fall or spring so far as it regards their after progress. Cattle, for instance, that are in poor condition in spring, will be behind their better-conditioned mates all the summer, and because they start

behind. The difference is still greater in the fall. Cattle, stock of any kind, that are poor and thin in the fall, cannot go through the winter as well as others that start in with good health and flesh; and because of that fact, we urge upon our readers the importance of having their stock in good condition all the fall. If it is young, every individual ought to be kept in good growing trim without interruption. Send every one into the cold season in advancing mood, and push them right along all winter. Work animals do not need extra care beyond health and a fair amount of flesh—good working condition.

But it is impossible to keep stock in good condition now without extra care. There are so many and such sudden changes of temperature, and such frequent and varied conditions of atmosphere as to moisture so many opportunities for contracting lung diseases and other affections in late fall, that without extra care our animals will surely fall off in flesh and be that much less prepared to encounter and endure the rigors of winter.

And then, everything we do to keep up a good condition in our stock now, is that much labor saved, because, by dropping back in growth, we lose all the time and feed necessary to "catch up" again. Every step in a horse-race is that much gained or that much lost. It is precisely the same in handling stock. Every step—every day, every feed-time, indeed, is a gain or it is a loss. And every loss resulting from lack of feed or care is a double loss, because it takes more both of time and of feed, to pick up the lost stitches than it does to keep weaving right along. Everything is to be gained and nothing lost by taking extra care of stock in the fall.

Different Breeds of Sheep.

The following is a continuation of the article begun in last week's paper entitled "Different breeds of cattle and hogs:"

BREEDS OF SHEEP.

The breeds of sheep are usually classified by the character of the wool into fine or felting-wooled, middle, and long, coarse or combing-wooled breeds. Except the Merino, which has been brought to us in various forms from France, Spain and Germany, all our breeds are from England.

The American Merino is now a proper name for nearly all the Merinos in the country, for the skill of American breeders has much modified and improved the Spanish Merino, from which the modern fine-wool sheep of the country have descended. These sheep are not large, 100 lbs. being a good weight for a ewe and 150 lbs. for a ram. The form is only fairly good for mutton production. The rams have long, curling horns; the ewes being hornless. The entire body is thickly covered with a fleece of very fine wool, which extends down over the face and on the legs to the feet. The wool is very oily and is dark colored on the ends, the oil giving a dark hue when opened. The skin is usually more or less wrinkled or folded. Fleeces weighing from 18 to 25 lbs. are not uncommon, and some have weighed over 38 lbs. The Merino is by far the most numerous of any breed in this country. It is hardy, active, thrives well in large flocks, or on poor pasturage. The mutton is of fair quality. The French Merino is a much larger sheep, giving a heavy fleece, and claimed to be of good fitness for mutton production. It has never been generally popular in this country.

There are several breeds of English sheep known as the Down breeds. They produce the middle wools and are counted the best mutton sheep so far as quality is concerned.

The Southdown may be counted the

original of the Down breeds. All the others have been more or less crossed with this. The Southdowns are unsurpassed in form; compact, broad bodied, with fine bones and fine carriage, they are, to many, the most attractive of sheep. Like all the Down breeds, they have dark-colored faces and legs. The fleece is not heavy nor is the fiber either long or fine. The great excellence of this breed is the production of a large carcass of high quality of flesh. Both in England and this country the Southdown is one of the most fashionable breeds.

The Shropshire-down, from the English county of this name, somewhat resembles the South-down, by crossing which on the native sheep of Shropshire, it was produced. It is larger, but not quite so symmetrical; yields a considerably heavier fleece; is very prolific, and its larger carcass is of practically as good quality as that of its more fashionable rival. The South-down is the more fashionable, the Shropshire the most widely popular breed in England.

The Hampshire-down is a breed from the south of England, somewhat resembling the Shropshire; is rather larger; sometimes a little coarser. It is noted for the rapid growth of the lambs and possesses in general the qualities of other Down breeds.

The Oxfordshire-downs are the product of crosses between Down sheep on the Cotswold and other long-wooled breeds, and in form and fleece clearly show traces of both lines of ancestry. The wool is often nearly as long as that of the long-wool breeds proper. This breed has many merits, a lack of uniformity is perhaps its most serious objection, but this is fast ceasing to be noticed.

The long or combing-wool breeds in this country are the Leicester, (pronounced Lester), the Cotswold and the Lincoln.

The Leicester is the oldest or first improved of the combing-wool breeds, and has been used to improve the others. In this country it is not quite so popular as the others, and has often been crossed with them. It is of large size; has a fleece of long, silky wool, sometimes a foot in length; the face and legs are white and bare. Sheep of this breed fatten readily, but it is sometimes objected to them that the mutton is too fat.

The Cotswold is one of the largest breeds of sheep. Standing on rather long legs, with a high carriage, it looks still larger than it is. The fleece is very long; often loose and open. There is a tuft of wool on the forehead, in contrast with the Leicester. The mutton is not of the very highest quality. The Cotswold has proved valuable in many cases when crossed on the Merino or small common sheep, increasing size and giving greater length to the wool.

The Lincoln is now, probably, the most popular combing-wool breed in England. It is of very large size; has much vigor, and its fleece is not only long and of good weight, but is counted superior in quality to that of other breeds of the same class in general. These three breeds much resemble each other to the untrained observer.

The Best Draft Horse.

M. Newgass, one of the principal extensive horse dealers of Chicago, says as follows of the grade Percheron-Normans: "Of draft horses I handle more Normans than of any other breed. They are more enduring, have better feet, are finer built, more attractive, and are true to work. They are broken before they are ever harnessed. They will sell in New York, conditions being equal, for from \$50 to \$75 more than a Clydesdale. I advise farmers to breed their mares to Percheron-Norman horses in preference to any other breed."—Chicago Tribune. About 1,400 Percheron-Norman horses have been imported from France by M. W. Dunham, Wayne, Ill., 390 of which the present season.

Horticulture.

Crimson Beauty Raspberry Again.
Mr. Purdy, in his Fruit Recorder for September, makes a series of personal attacks on various members of the Leavenworth County Horticultural Society, and of the State Society, because these organizations have officially exposed and condemned his and Dr. Stayman's act of placing on the market the Crimson Beauty as a new seedling red raspberry. He criticises the language used by the chairman in a note to Dr. Stayman, and mentions, with ridicule, his occupation; he comments on the youth, inexperience and obscurity of the two other members of the committee who made the original report that the C. B. was an old variety re-named; he calls the State Society "a fine lot," excepting four or five, and asks his readers to accept such criticisms and untruthful statements as proof that the C. B. is all he claims it to be.

Mr. Purdy has bitten off more than he can chew, as we say in the West, when he undertakes, by such means, to refute the report of that committee, or damage the reputation of Kansas horticulturists. When Mr. Purdy says that the chairman of that committee is only "a clerk in a store," he proves that his statements regarding the occupation of the writer is as untrustworthy as his history of the origin of the C. B. Dr. Stayman could not have given him his information as the Doctor is an honorable man. Mr. Holman resigned his place on the committee because Dr. Stayman said he would not allow him to come on his premises. The Doctor further said he would be satisfied to have the writer, or any other member of the county society on the committee, and would give them every facility for investigation, which he did.

When Mr. Purdy says that "a man that would use the word 'vines' in connection with raspberries, must have great experience," etc. He only proves that he has not talked with or received communications from all experienced horticulturists. When Mr. Purdy says that "Holman claims the Crimson Beauty and the old Imperial to be the same," he only proves that Mr. Holman, in common with Dr. Stayman, Mr. Chandler and many others, were unaware of the existence of more than one variety of Raspberry in the Kinnear plantation from which all procured their plants. When Mr. Purdy says that "no Crimson Beauties were brought to market, except by Dr. Stayman," he only proves that the others were not raising berries for market. When Mr. Purdy says that "the committee are all young and inexperienced," he only proves that he has never visited the fruit farms of Mr. Eason, or Mr. Smith, or the fruit-garden of the "clerk in a store," or had any truthful account of the same. But when he says that the State society and our county society are under the control of a couple of men to such an extent that, to satisfy their spite and jealousy, these societies did publicly and officially publish false and unfounded statements purposely to injure either Dr. Stayman or himself in purse or reputation, Mr. Purdy's arguments reach the height of absurdity, and are utterly unworthy of notice.

The committee were aware of all that had been said concerning the C. B., and set out early, determined to arrive at the truth regardless of consequences, and watched the plant from bud to fruit, to learn its qualities, and made numerous visits and inquiries to get its history. Mr. Holman said—"go to Dr. Marshall's garden and you will find C. B., for the plants came from the Kinnear place," but the committee did

not find C. B. there, and voted unanimously that "Mr. Holman must go," meaning that he was mistaken and the committee would so report.

On the day of the meeting, the first Saturday in July, Mr. Holman still contended that he was not mistaken and said—"go to Mr. Morrow's, his patch is from the Kinnear place. The committee asked another week, and on that same afternoon Mr. Eason and the writer visited Mr. Morrow's place, and before Mr. Eason had reached the bushes he exclaimed "that's Crimson Beauty." This finished the work of the committee. It had been well proven that many persons had procured their plants from the Kinnear place, and it was evident to the eyes of the committee that there were two varieties of raspberries. This proven, the origin of C. B. was plain.

Mr. Holman happened to get all out of the purple spined, worthless variety, and dug them up. Dr. Stayman had gotten at least one of the green spined, and from it propagated Crimson Beauty. Mr. Chandler got plants of both varieties, which can be seen to-day.

After the committee's report was written, and before it was published either in the Leavenworth papers, the KANSAS FARMER or the Rural New Yorker, the writer read it to Dr. Stayman in the presence of his assistant, Mr. Black, and at that time said to him—"Doctor, I understand you to say that Mr. Chandler's plantation is an independent one, that he did not get his plants from you." He answered "yes." Mr. Chandler's plants came from the Kinnear place, and Dr. Stayman says they are Crimson Beauties and Mr. Purdy is selling them for C. B's.

The committee have no doubt that the half dozen or more plantations which they have visited, and which were set with plants from the Kinnear place are the same as Dr. Stayman's and Mr. Chandler's C. B's.

Before the matter is finally disposed of, the origin of the Kinnear patch of Imperials as they were called, will be found. At this time they have been traced back to Jaynesville, Wisconsin.

The writer will say further that Dr. Stayman has more than once said to him that "he never claimed the C. B. to be a new seedling." On being shown such a statement in Mr. Purdy's circular, Dr. Stayman said "Purdy put that in." Is Mr. Purdy an honorable man?

Do fruit growers want any more or any better evidence that the C. B. is not a new variety? The committee believe they have fully sustained the proposition that it is not. They did full justice to the good qualities of fruit and plant, probably overdoing the matter, they have only condemned the act of placing an old variety on the market under a new name for the purpose of money making.

Dr. Stayman deserves credit for the re-discovery of a valuable raspberry and should have his reward; but the public should not be unmercifully fleeced, or horticulture brought into disrepute.

C. W. KEIFER,
Sec'y Leav. Co. Hort. Society.

A Fatal Mistake

Would be not to take Dr. K. V. Pierce's 'Golden Medical Discovery' if you are bilious, suffering from impure blood, or fearing consumption (scrofulous disease of the lungs), cold by all druggists.

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No. 174 Kansas Avenue, Topeka, Kansas.
\$3.00 per dozen for BEST CABINETS.

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REAL ESTATE AND LOAN AGENT, Topeka, Kas.
Established in 1868. The oldest in the city. If you desire to purchase or sell lands or city property, address or call on
H. H. WILCOX,
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TOPEKA TRUNK FACTORY,
122 Kansas Avenue, Topeka, Kas.
TRUNKS, Traveling Bags, Shawl Straps Shopping Patches, Pocket Books, etc. Trunks & Sample Cases made to order. Orders by mail promptly attended to.

D. HOLMES,
DRUGGIST, 247 Kansas Avenue, Topeka, Kansas
Reliable brands of Marhite Oils, White Lead, Colors and Mixed Paints.
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GEO. B. PALMER,
UNDERTAKER, 291 Kansas Ave., Topeka, Kansas.
Dealer in all kinds of Cloth, Wood and Metallic Cases and Caskets.
Office open and telegrams received and answered at all hours of the night and day.

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123 KANSAS AVENUE, TOPEKA, Kas. Keeps the largest and best selected stock of Watches, Jewelry, Silverware and Diamonds in the State. All goods engraved free. Fine watch repairing a specialty.

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Tobacco and Smokers' Articles.
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Oscar Krauss,
WHOLESALE DEALER IN
Saddlery Hardware, Leather, Findings,
Hides, Fur, Etc., and
Manufacturer of Saddles and Harness.
21 and 23 Kansas Ave., NORTH TOPEKA, KANSAS.

Topeka Medical and Surgical INSTITUTE.
ESTABLISHED IN 1882.
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Physicians in charge; also medical attendants at the Topeka Military Hotel. Vapor and Medicated Baths. Special attention given to the treatment of Chronic and Surgical Diseases and Diseases of the Ear and Eye.
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We have now in stock this year's growth of
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Orchard Grass, Kentucky Blue Grass,
and all other kinds of Field and Garden Seeds. Call and examine quality and prices. Also dealers in FLOUR and FEED.
EDSON & BECK,
Sixth Avenue First Mill,
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COOLEY CREAMER.
The COOLEY (the only submerged) system for setting milk for cream is the only way to make the
Most and Best BUTTER
in all seasons of the year. Creamers, or cans only. Wholesale or retail, by
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AGENT FOR
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THE NEW SHAWNEE Roller Mills,
Topeka, . . . Kansas,
Manufacturing the celebrated brands of flour
SHAWNEE FANCY
—AND—
TOPEKA PATENT!

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EVERY SACK WARRANTED.
Wheat taken on Deposit for Flour. Highest cash price for wheat.
SHELLABARGER & GRISWOLD.

Out of Debt: Happy Homes.
Jefferson county, Kansas, don't owe a dollar. Map, statistics, price of land, etc., free. Address Metzger & Insler, Gallop, Kas.

MISCELLANEOUS.

Irrigation
IS THE ACT OF FLOWING WATER over lands, to NOURISH CROPS. The 8 reams of the ROCKY MOUNTAINS enable the COLORADO FARMER to raise a Big Crop Every Year. He defies drouth and never suffers from rain. Summer is temperate, winter open and mild. THE GREAT Irrigation Canals! recently built, have opened up the most desirable lands in America. SEND FOR PAMPHLET TO S. J. GILMORE, ASSISTANT MANAGER The Platte Land Co. (LIMITED) Denver, Colorado. *Late Land Commissioner Union Pacific R. R.

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One of the best Ranches in the State of Kansas—OVER TWO THOUSAND ACRES deeded land; 6 miles of never-falling water running through it; plenty of timber; good shelter for stock, and good buildings; 1,500 acres under fence; 500 acres in rye, sorghum and fallot; well stocked with Registered and high-grade Short-Horn Cattle, CLYDESDALE AND KENTUCKY MARES. Adjoins Fort Larned Reservation of over 10,000 acres of fine-grazing land. The increase of the stock alone this year will be over \$10,000. Reason for selling, ill health. For further information as to price, etc., call on or address
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HOLSTEIN CATTLE!
500 HEAD
Of the finest Quality and best families to be found in Holland.

CLYDESDALE and HAMBLETONIAN HORSES.
Rare inducements offered to purchasers on the finest quality of Stock. Send for Catalogues. Mention this paper.
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A PAPER FOR THE PEOPLE.
Devoted to Society, Lodge, Amusement and Dramatic News, good Literature, etc. Will be published especially for the State of Kansas. Terms, \$2 a year; \$1 for six months. Specimen copy free. Address M. O. FROST & SON, Pubs., Topeka, Kansas, Clubbed with the KANSAS FARMER for \$2.75.

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Every Farmer should have a good Weekly Newspaper
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Our Mammoth Illustrated Catalogue of above and many other marvelous and curious things is a wonder to itself sent FREE on application. This is valuable of AGENTS WANTED MAGIC LANTERNS 150 pages, including Photo and Lecture, 100c. HARBACH ORGANINA CO., 209 Filbert Street, Philadelphia, Pa.

THE KANSAS FARMER

Published Every Wednesday, by the KANSAS FARMER CO.

H. C. DEMOTTE, President. E. R. BROWN, Treasurer and Business Manager. H. A. HEATH, General Business Agent. W. A. PEPPER, Editor.

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NEW ADVERTISEMENTS.

- S. C. Robb, Farm for sale. D. W. & M. F. R., Buckwheat wanted. William Bryant, To sto k men. David Ware, Strayed. M. P. Stamm, Commission Merchant. C. O. Blank, Baker. G. & C. Meriam & Co., Webster's Dictionary. Daniel F. Beatty, Organ. The Rural New Yorker, Why not? Glover M'g Co., Shaver's mill. Harbach Organ Co., Wo- ders. W. F. Fitzgerald, Patent. H. Kane A. M. D., Opium.

Do not let sweet potatoes have even a taste of frost.

The acreage of wheat in Kansas will be larger in 1884 than it was in 1883.

There was a heavy frost in this region last Sunday morning. It destroyed all tender vegetation.

There is nothing in the condition of the grain market to justify hope for much higher prices on wheat of the crop of 1883.

The President of the United States has appointed a commission, headed by Hon. Geo. B. Loring, to investigate the curing of pork in this country.

A good many Americans are making fools of themselves in their treatment of Lord Chief Justice Coleridge. So much attention must be offensive to him.

The U. P. advertises that a new schedule of freight tariff will be adopted by that road December 1, but whether it is to be a reduction remains to be seen.

Our club circular tells all about getting up clubs, our terms to subscribers in different sized clubs. Send for one and get the FARMER for \$1.15, \$1.20 or \$1.25, by getting up clubs of six, eleven or sixteen subscribers.

A Kansas City dispatch states that a committee, representing the U. P., the A., T. & S. F., and M. P. railways, will ask the Railroad Commissioners to reopen the Beloit case, so that further testimony and argument may be heard.

This year's experience, like that of all others, since experiments began in Kansas, shows that fall plowing, when well done, is a good thing. But the work must be well done. Scratching the surface is not plowing. Get down into the earth.

It seems that the German Government has enacted a law forbidding the distribution of pamphlets and other advertising matter concerning different States of the American Union. Ten thousand Texas pamphlets were confiscated at Hamburg a few days ago.

Those of our readers who expect to get up clubs of subscribers for the KANSAS FARMER and have not already received our circular club letter, will please notify us by postal card, and we will mail the circular to their address. It contains specific information about clubs, terms to subscribers and to persons getting up the clubs.

SUGAR-MAKING IN KANSAS.

The Foundation Laid for a Permanent Industry--No Further Uncertainty--Sugar Made by Tons from Kansas Cane.

The KANSAS FARMER has taken much interest in the development of sugar-making in this State. We have believed all along that sugar would, some day be made from sorghum, and it has been fully demonstrated that Kansas soil and climate are peculiarly adapted to the growth of the cane. Experiments with Kansas cane have proved that it is richer in sugar than the cane of any other State. This fact adds much to the value of the new industry for this State, now that sugar is successfully made from our cane, and in large quantities. There are now two large sugar-making establishments in successful operation in the State. The editor of the FARMER was hoping to enjoy the pleasure of a visit to these places, but unavoidable conditions have operated to prevent. Our readers, however, will not be left without complete information on the subject, for the local papers and Topeka Daily Capital have furnished excellent reports, so that we have all the data needed to inform ourselves thoroughly on the present condition of sugar-making in Kansas. Some six weeks ago, the Sterling (Rice county) Gazette contained the following:

The first sugar of the season was made to day at the Kansas Sugar Works at this place. The strike, or pan full, aggregates about 15,000 pounds. The yield is about 60 pounds per ton of cane, or between 500 and 600 pounds of sugar per acre besides some 50 gallons of excellent molasses. This sugar is made by the Weber & Scovell patent process under the personal supervision of Mr. Scovell. The Kansas Sugar Works are operated by a stock company composed of Illinois and Massachusetts capitalists. The following figures will be found interesting: Cost of building and machinery, \$45,000. Power of steam boilers, 350 horse power. Capacity of crusher, 250 tons of cane per day. Capacity of defecator, evaporators, bone filters, etc., equal to that of the crusher. Capacity of vacuum pan, 15,000 pounds of sugar six times per day, or 90,000 pounds per day. Capacity of the sugar wagons mixer and centrifugals, that of the vacuum pan. Number of hands employed sixty. Aggregate of weekly pay roll, \$500. Number of farmers who have contracted and are delivering cane, 40. Number of acres of cane contracted, 1,500. Number of men engaged in cutting and hauling cane, 75. Price paid for cane delivered, \$2 per ton. Wages paid by farmers to cane-cutters, \$1.50 per day with board. This year's crop of 1,500 acres of cane will, according to the above figures, yield 750,000 pounds of sugar, worth \$60,000 and over 75,000 gallons of syrup, worth \$30,000 or an aggregate value of \$90,000. This is but the beginning of a vast industry. It is proposed to erect at convenient places, auxiliary works for the manufacture of semi-syrup, which shall be made by the Weber & Scovell process, so as to preserve the sugar in a crystallized form, and send it here to the central works to be made into sugar. This will expand the industry many fold. When it is remembered that this cane is grown upon land, most of which the government recently gave to the farmers under the homestead law, and that there are millions of acres here adapted to its growth, the source of the future sugar supply is not far to seek.

The Hutchinson (Reno county) News, September 20, contained a long article descriptive of the works at that place, beginning thus:

As stated last week, the great problem of producing from sorghum cane in paying quantities a merchantable article of sugar has been solved, and Hutchinson has the honor of being the birthplace of this solution.

After minutely describing the machinery and processes, the article concludes as follows:

The capacity of the centrifugals is 3,200 pounds per hour of sugar and 320 gallons of syrup. The syrup is run into a large storage tank of 8,000 barrels capacity and the sugar barreled. To run all of this vast amount of machinery requires a number of engines and five large boilers of 100 horse power each. An important feature on the fourth floor is the laboratory where Professor Swenson analyzes every field of cane before cutting it, thus determining to a mathematical nicety the exact amount of sugar it contains. Then if a piece has been injured it will not be

run into sugar, but syrup. Ten tons of cane, or a minimum acre, will produce 800 pounds of sugar and 80 gallons of molasses, which is certainly evidence that it will pay.

Referring to the origin of the Hutchinson works, the Topeka Capital says that about four years ago Professor Swenson, of the University of Wisconsin, who had already established a reputation as a chemist of unusual ability, began to study the subject, and he made experiments for nearly three years, the State of Wisconsin having appropriated \$2,500 for the prosecution of such researches and experiments. About this time the United States government, through the Agricultural Department at Washington, offered a prize of \$1,200 for the "best method of treating sorghum cane." This prize was taken by Prof. Swenson.

Prof. Swenson's success caused him a large and new correspondence, resulting in the formation of a company with W. L. Barker as president, and the establishment of a factory at Hutchinson. The company this year will use up the cane grown on 2,000 acres of land, 1,500 of which belongs to the company, and 500 acres to farmers in the immediate vicinity of Hutchinson. The 2,000 acres this year will produce between 25,000 and 30,000 tons of cane.

The origin of the works at Sterling is thus given in the Capital: "Some three years ago Prof. Scovell, who was instructor in agricultural chemistry in the Illinois Industrial university, at Champaign, Illinois, assisted by Prof. Webber, instructor in chemistry at the same institution, entered upon the search for a method of making sugar from sorghum cane. After much study and experimenting they finally solved the problem. The trustees of the institution made certain demands of the inventors to which they refused to accede, and as a result they left the institution. A company was at once formed in Champaign for the purpose of erecting a sugar factory, and the result was soon accomplished. The mill proved to be a successful venture, and sugar from sorghum was no longer an experiment."

That was at Champaign, and now Messrs. Scovell and Webber and their associates are located at Sterling, Kansas, and turning out sugar by the ton.

The officers of the present company are: President, J. W. Langley, of Champaign, Ill.; vice president, P. H. Kellogg, of Boston, Mass.; secretary, H. M. Beardsley, of Champaign.

The company now works a force of fifty men, besides the farmers who deliver their cane at the mill. With the present force and machinery the mill turns out daily about 9,000 pounds of sugar and twenty barrels of syrup.

The company this year has a contract for 1,400 acres of cane of the farmers, paying them \$2 per ton at the mill for the stripped cane, and \$1.75 for the unstripped cane. The average yield per acre of cane is 12 tons, and many run higher. One farmer is reported who raised the excessively large crop of 33 tons on one acre of land.

Touching the future of sugar in Kansas, and especially in the valley of the Arkansas, Prof. Scoville says: "There is certainly a great future before this valley, and for that matter, this entire country, including every State where sorghum can be successfully grown. The sugar which is manufactured from the sorghum is established beyond a doubt as a superior article to the best Orleans. The Cuban and Orleans sugars polarize 92 while the sorghum sugar polarizes 98. Thus you see it is a sweeter sugar, it may be made as coarse grained or as fine as the Orleans, and has all the other qualities that go toward making a good sugar. We can sell it

readily at 8 to 8 1/2 cents per pound, which is cheaper than the Orleans of the same grade. There is no reason why it should not prove the one great industry of this entire valley. We are preparing to establish mills at different points all along this river, and we are educating a number of young chemists in the process of sugar making with a view to putting them in charge of the factories of the future. We are selling the sugar and syrup as fast as we make it. We are refining our own sugar and send it direct to the consumers. Our capacity for work is not what we would like it, though we cannot do better this season. We expect to enlarge and improve next year, and will have no difficulty in turning out any quantity of the product. We expect to run ten months in a year crushing 100 days of that time. The balance of time we will refine our sugar, and turn into sugar the syrup from a number of syrup mills which we expect to locate in the country around us."

On the same subject, Mr. Barker, of the Hutchinson works, says: "We are well satisfied with the present outlook. We can assure the public that the business is profitable, and that it is no longer an experiment. It is an assured success. We expect to increase our facilities and enlarge our capacities for work. Next year we will put in more cane and expect to establish a number of auxiliary mills around us, that will make the syrup, and we will make it into sugar after the crushing season closes. We are now making about 40 barrels of sugar per day, besides 1,200 gallons of fine marketable syrup, and we are selling all of it. We are refining a little of it now, but expect to extend our facilities for refining in the future. Then there is one more article in connection with the business, continued Mr. Barker, which promises to be of as much importance as the sugar, and that is starch. The seed from the cane has been found upon analysis to contain 72 per cent. of pure starch while the best quality of corn contains only 62 per cent. There is money in the starch, and we are saving the seed for the purpose of making starch when the sugar season is over. We will have 30,000 bushels of seed, the greatest portion of which we will manufacture into starch ready for the market. It promises to be a big industry of itself. When we get all our work in operation it will take a large force to run the business. We work 150 men and 38 teams, now, and next year we expect to work more than that. People throughout the entire country are becoming much interested. Eastern capitalists who sneered at the idea a year ago, are now arriving at the conclusion that the business amounts to something after all. We receive letters of inquiry by the bushel every week, asking the particulars of the business. We get many letters from parties asking us to locate in their neighborhood. We received a letter the other day from Galveston, Texas, setting forth the superior advantages of that country as a sugar growing country. Among other things, they explained that two crops could be produced in a season. We have numberless visitors here from all over the country, all interested in the ultimate success of the business. There is certainly a grand prospect before this valley, and I have no doubt that a few years will see it covered with sugar plantations, and filled with sugar mills and refineries."

Methods of operating are substantially the same at both works—Hutchinson and Sterling. We quote from the Capital a description of the processes at Hutchinson:

The first process to which the cane is subjected after it is grown is the cutting and topping. This is done in the field

Salt Crust on Butter.

Professor L. B. Arnold, in a late number of the New York Tribune, says that "salt is taken up and held in butter by means of water the butter contains. If there is albuminous or cheese matter in butter that will also take up salt. Butter fats have no affinity for salt, and do not dissolve it or combine with it except in a mechanical way, just as they would do with sawdust if mingled with them. The more water there is in butter, the more salt it will dissolve and take in the water holding the salt in the butter in the form of tiny drops of brine. When there is much water in a sample of butter, and the little drops of brine are pretty numerous, the contraction of the butter by cooling crowds more or less of them outside the butter, and as they come to the surface the water in the brine dries away and leaves the salt on the outside of the butter in the form of a crust.

"The quantity of water in butter depends something upon the quality of the milk from which it is derived, but more upon the manner of churning and working. When cream is churned pretty warm the butter takes in more water and also more cheesy matter than when the churning is done at a lower temperature, and it takes more when gathered in a lump in the churn than when gathered in the granular form, and the finer the granules the freer will the butter be both from water and cheesy matter. To avoid liability to crusting with salt the churning should be done at as low a temperature as it will bear; and by reducing the temperature when the butter begins to form to fifty-four or fifty-five degrees the butter will form in fine granules and be in its purest and best condition. Butter should always be churned and gathered in this way to get the best quality. If one is using butter already made which is inclined to crust with salt, either by contraction from chilling or by simply drying out its water by standing exposed to the air, as it often will, he may avoid the disagreeable crustation by keeping it under the brine except when it is wanted on the table."

By Universal Accord,

AYER'S CATHARTIC PILLS are the best of all purgatives for family use. They are the product of long, laborious, and successful chemical investigation, and their extensive use, by physicians in their practice, and by all civilized nations, proves them the best and most effectual purgative Pill that medical science can devise. Being purely vegetable no harm can arise from their use, and being sugar-coated, they are pleasant to take. In intrinsic value and curative powers no other Pills can be compared with them; and every person, knowing their virtues, will employ them, when needed. They keep the system in perfect order, and maintain in healthy action the whole machinery of life. Mild, searching and effectual, they are especially adapted to the needs of the digestive apparatus, derangements of which they prevent and cure, if timely taken. They are the best and safest physic to employ for children and weakened constitutions, where a mild but effectual cathartic is required.

For sale by all druggists.

The only profitable way to grow crops in a bearing orchard is to manure double, once for the crop and once for the fruit. Even then, unless the season is favorable, the yield of hoed crops or grain will often not pay expenses. Raspberries can better be grown in the shade of apple trees than anything else. They love shade, provided the soil is sufficiently rich.

Sudden changes of temperature are very unfavorable for growing potatoes at any season. The hot weather which occurred in many places just as the tubers were forming, is credited with being the cause of the blight. Potatoes struck with this blight are rotting. They should be dug as soon as possible and those not affected stored in a cool dry place.

In bean-growing districts the crop is now mainly harvested by a machine drawn by a single horse which cuts the stems of the beans just below the surface, leaving the crops standing. It greatly decreases the labor of harvesting, and saves the bean stems and leaves from being mixed with dirt, as in the old method of hand pulling.

**DR. JOHN BULL'S
Smith's Tonic Syrup**

**FOR THE CURE OF
FEVER and AGUE
Or CHILLS and FEVER,
AND ALL MALARIAL DISEASES.**

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the **SAFE, CERTAIN, SPEEDY and PERMANENT** cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of **BULL'S VEGETABLE FAMILY PILLS** will be sufficient.

BULL'S SARSAPARILLA is the old and reliable remedy for impurities of the blood and Scrofulous affections—the King of Blood Purifiers.

DR. JOHN BULL'S VEGETABLE WORM DESTROYER is prepared in the form of candy drops, attractive to the sight and pleasant to the taste.

**DR. JOHN BULL'S
SMITH'S TONIC SYRUP,
BULL'S SARSAPARILLA,
BULL'S WORM DESTROYER,
The Popular Remedies of the Day.**

Principal Office, 831 Main St., LOUISVILLE, KY.

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LIFE-SAVING PRINCIPLE
THE GREAT BLOOD & LIVER PURIFIER



**A SURE CURE FOR
Sick Headache, Dyspepsia, Langour,
Nervous Exhaustion arising from over-
work or excess of any kind,**

**—AND FOR—
Female Weaknesses.**

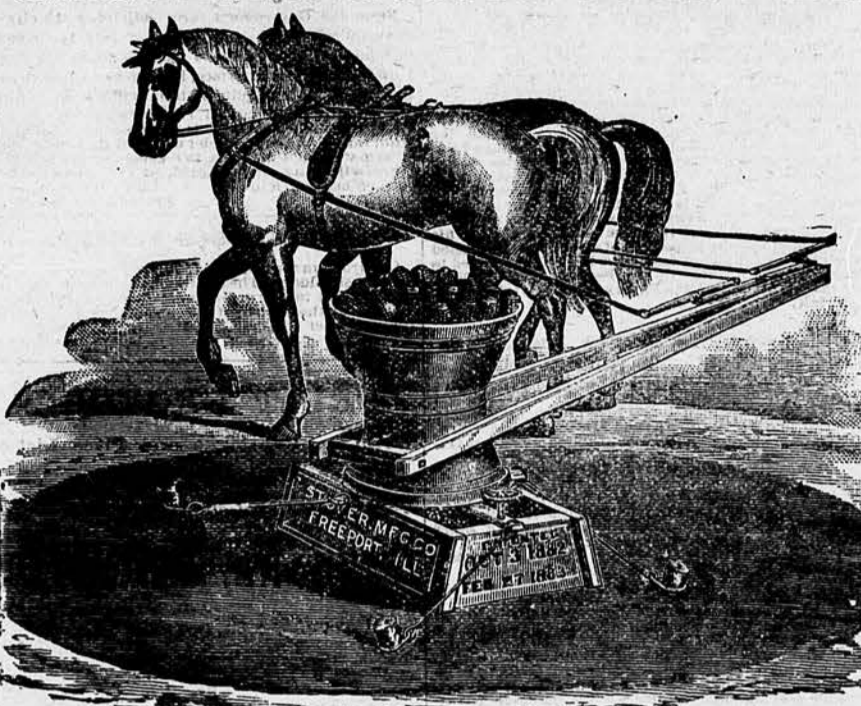
**—IT PREVENTS—
Malarial Poisoning and Fever and Ague,
And is a Specific for Obstinate**

CONSTIPATION.
PRICE \$1.00 PER BOTTLE; SIX FOR \$5.00
SOLD BY DRUGGISTS EVERYWHERE.

**DR. A. C. GIBSON'S
FEVER and AGUE CURE.**

This TONIC NEVER FAILS to cure
Fever and Ague, Dumb Ague, Malarial Fever,
Night Sweats, Ague Cake, Neuralgia, Jaundice,
Loss of Appetite, Dyspepsia, Bilious Fever,
Rheumatism, and Typhoid Fever.
Laboratory 1228 Grand Avenue, Kansas City, Mo.
Sold by all Druggists. Price 25 and 50 Cents.

STOVER'S Geared Feed Mill

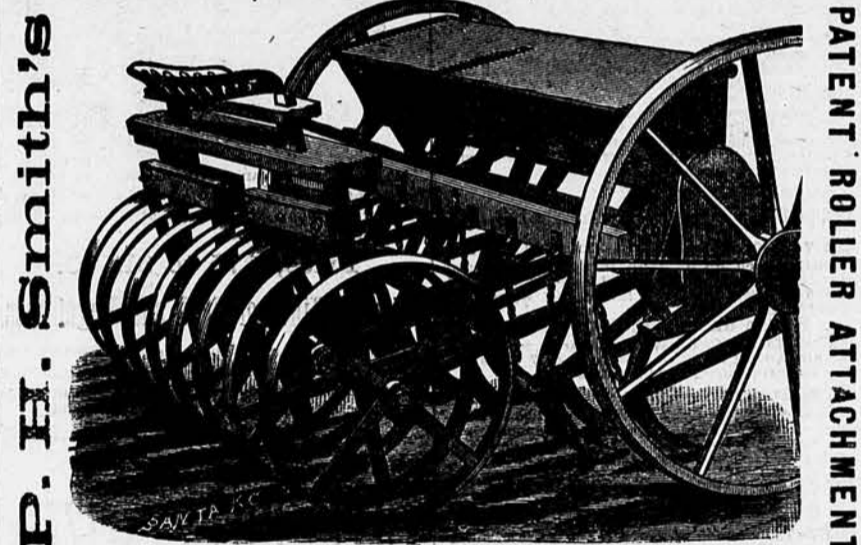


Grinds Corn and Cob and all kinds of Grain successfully. Unequaled Capacity, on account of its Triple Gear. Fitted to run by belt or tumbling rod, when desired. For sale by principal dealers in United States.

SEND FOR ILLUSTRATED AND DESCRIPTIVE CATALOGUE.
STOVER MANUFACTURING CO., FREEPORT, ILL.

WHEAT-GROWING

MADE A CERTAINTY BY THE USE OF



P. H. Smith's PATENT ROLLER ATTACHMENT
— FOR SEED DRILLS. —
The soil is firmly pressed on the seed, causing the soil to adhere to the seed, which greatly assists germination. The compactness of the soil retains the moisture, preventing injury by drought. Requiring less than one-half the seed usually sown, from the fact that none is wasted, either by a failure to sprout in the fall or by inter-killing, by pressing the soil firmly on the seed in track of the drill-hoe as it is being sown by the drill, leaving a wheel-track for the grain to grow in, which locates the wheat plant 2 to 4 inches below the general surface of the field, causing the plant to be covered by the drifting soil, it being pulverized like flour by the early spring weather, which is the most destructive weather that wheat has to pass through. The Attachment CAN BE COUPLED TO ANY GRAIN DRILL.
The IMPROVED HAY-STACKER works by a single horse, elevates the hay and dumps at any point of elevation, thereby saving travel for the horse and time in the operation. Will haul 10 to 20 tons per day. The rake runs on wheels and before the team. The rake is tilting, and when loaded the teeth are raised off the ground and all the weight is carried on the wheels,—operated by a boy. Simplicity, durability and perfection of work is not yet equalled.
Circulars and any information sent free to any address upon application.

Manufactured **Topeka Manufacturing Co., Topeka, Kas.**

Kansas City Stock Yards,

Covers 130 acres of land. Capacity 10,000 Cattle; 25,000 Hogs; 2,000 Sheep, and 800 Horses and Mules.
C. F. MORSE, General Manager. H. P. CHILD, Supt. E. E. RICHARDSON, Asst. Treas. and Asst. Sec'y
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Buyers for the extensive local packing houses and for the eastern markets are here at all times, making this the best market in the country for Beef Cattle, Feeding Cattle, and Hogs.
Trains on the following railroads run into these yards:
Kansas Pacific Railway, Atchison, Topeka & Santa Fe R. R.,
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