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The Kansas Farmer.

J. K. HUDSON, Editor & Proprietor, Topeka, Kan.

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ORCHARDS AND VINEYARDS OF DOUGLAS COUNTY, KANSAS.

The fruit farm of W. E. Barnes, at Vinland, on the L. L. & G. E. R. R., twelve miles south of Lawrence, consists of 32 acres. Running through the center of the plantation from north to south is a ridge sloping gently to both the east and the west. The land most elevated is sandy; next is the deep alluvial or muck from the higher land, and then a stiff clay loam. There are about 200 acres covered with orchards and trees including the vineyard of 20 acres.

The trees are planted in blocks of from 20 to 40 acres each, most of them surrounded with groves of maples, ash, honey locusts, elms, etc., and interspersed with belts of evergreens which stand from 6 to 30 feet in height. These consist of white, Scotch and Austrian pines, Norway spruces, arbor vitae and red cedar, and which for beauty could hardly be excelled in their native climes.

In the orchards there are in round numbers 8,000 apple trees, 1,000 pear trees, 1,000 cherry trees, with peaches, plums, and a very general assortment of all the fruits and trees that succeed in our climate.

The apples are planted 20 feet apart, and as the first plantings which were put out 15 or 18 years ago are about closed up, many of the trees will soon have to be removed. The trees are headed 2 1/2 feet from the ground, and are very healthy and in general good condition; 75 or 80 varieties are cultivated and are now bearing; the leading varieties, however, are the Mo. Pippin, Ben Davis and Wine-sap. The crop this year is very large and the fruit fine; the crop is estimated at 10,000 bushels.

The pear trees are planted 16 feet apart; the crop this year is good and fruit No. 1. The leading varieties of standards are Bartlett, Duchess, Flemish Beauty and Howell; of dwarfs, Duchess d'Angouleme and Louise bon de Jersey. The trees are in good condition, are headed from 2 to 3 feet.

The cherries are mostly the Early Richmond, the crop the past season was light; trees are healthy. Other varieties of fruit trees, including persimmons and the sweet American chestnut appearing well and fruiting fair.

The grape vines are planted 7 and 7 feet, making about 2,000 vines; nearly all the varieties have been tested and laid aside except the Concord, Dracut Amber and Ives' Seedling, which succeeded well; Concord is the leading variety. The crop this year set heavy but has been badly injured by the rot. From 5 to 15 men are required to keep the plantation running and in good order. P. P. PHILLIPS.

A CHAPTER ON BUDDING.

Joshiah Hoopes writes to the New York Tribune:—The only trustworthy rule as to the time for budding is, whenever the bark of the stock separates readily from the wood, or, in technical terms, "the sap runs;" and when the shoot from which the buds are to be removed is sufficiently matured. In the Middle States, from the 16th of August to the 15th of September is generally the proper time [about the same in most of Ontario.—Ed. W. G.] although frosts or even cold nights will frequently check the flow of sap and cause the bark to tighten. When the latter occurs, however, a thorough stirring of the soil around the stock will usually cause the bark again to loosen, provided warmer weather again sets in. Early in the season some kind of fruit trees, as the



Kansas State Agricultural College.

BUILDINGS OF THE KANSAS STATE AGRICULTURAL COLLEGE.

The above cut gives a good idea of the relative situation of the several buildings used by the Agricultural College, and so far as can be done in the space, a fair notion of the appearance of the buildings. The one on the right is at present known as the College building, though it is only temporarily used as such. It was built before our day, and was designed as one wing of an extensive barn. It is 42x100 feet, two stories high, and besides the chapel, contains nine rooms which are used by literary departments for recitation purposes.

The new barn is not shown upon the cut, but is situated about five hundred feet north-east of the College building, and is of the same size. It is admirably adapted to its purpose, furnishing complete accommodations for

peach, will be making an exceedingly vigorous growth, so much so as to endanger the success of the operation by the excess of sap. The latter may be checked by simply pinching off the tips of the growing shoots. Mahaleb cherry stocks are especially benefited by this treatment.

The operation consists merely in transferring the bud of some valuable variety to any good healthy stock. Having selected a few partially-ripened scions from the variety we wish to perpetuate, trim off the leaves, leaving about one-fourth of an inch of the stem as a handle to force the bud into position. With a sharp, thin-bladed knife take off a bud with a portion of bark and wood attached, entering about one-half inch below, and emerging the same above the bud. Care must be taken to perform this operation very carefully, as too deep a cut gives us too much wood, and if too near, the bud is liable to be injured. Some budbers remove this thin piece of wood, although it is mostly allowed to remain. The most extensive peach tree growers use only bark with the bud unimpaired, and prepare it by making the usual cut, only deeper than by the old method; but in place of allowing the knife-blade to emerge at the lower end, they withdraw it, and simply cut through the bark at that point, when by the aid of the thumb nail the bark and bud may be readily removed.

The insertion of the bud is the simplest part of the programme. It consists in making a T shaped cut through the bark of the stock, and gently pushing the prepared bud into place; should the bark prove somewhat tough, however, the edges may be slightly raised, but stocks in this condition must be regarded with suspicion.

A great deal depends upon tying properly, as I have known very many failures from this cause alone; and it matters but little how carefully the bud is cut or inserted, should the string be tied loosely or carelessly the bud will, in the majority of cases, fail to take.

The wrapping should be of some soft, strong material, the inner bark of the linden tree or basswood being preferred by our nurserymen generally. This is prepared by experienced persons during the summer, and can be procured of any nurseryman in small quantities. These strings are stripped into narrow shreds and well dampened. In tying the bud into the position, the string should always be drawn lightly and evenly, covering up every portion of the cut in the stock, allowing only the bud to show, bringing it closely in contact with the stem below, and drawing in under the point of the bud above. In about two weeks the strings will begin to "cut off," that is, the bark will form in ridges around the ligatures owing to the compression of the latter, when they should be slightly loosened, but not removed altogether; indeed, they should remain in place until late autumn, when they must be cut to prevent freezing beneath.

The ensuing spring will determine whether or not the operation has been successful, as frequently the bud will appear all right during winter, yet really have very little vitality. Head back the stocks to within three inches of the bud, and as soon as the latter grows, tie it up to prevent the wind blowing it off. Some of our most careful nurserymen stake up their young yearling buds, and if at all rare,

forty head of cattle and the horses needed on the farm.

About five hundred feet south of the College building stands the Mechanical building, which is 88x102 feet and two stories high. The whole of the lower floor is used as a carpenter shop, and is filled with benches, saws, lathes, etc. The upper floor furnishes three rooms for the Department of Instrumental Music, two for the Sewing Department, one for the Telegraph Department, and one for the Printing Department.

Immediately north of the Mechanical building is the blacksmith shop, 20x40, containing two forges and the necessary tools for working iron. It is not shown in the cut, and is the only wooden building on the grounds, all the rest being of stone.

One hundred feet east of the Mechanical building is the Horticultural building, 31x80 feet, one story and a high basement. The

main floor contains two lecture rooms, with apparatus cases; and the basement, in addition to cellars, furnishes a large working room for glass practice.

One hundred and fifty feet south of the Mechanical building stands the Laboratory, cross form 109x109 feet, one story. It contains a lecture room, office, balance room, physical laboratory, two large chemical laboratories and a kitchen laboratory.

The new College building will be situated one hundred feet south of the Laboratory. The Practical Agricultural wing, to cost \$12,500, will be completed next summer, an appropriation therefore having been granted by the last Legislature.

Each of these buildings is planned for a specific purpose and is adapted thereto. The State has never obtained as much room at the same outlay.

DIRECTIONS TO THOSE WHO WISH TO ENTER THE AGRICULTURAL COLLEGE.

The following "directions for applicants" are from the forthcoming catalogue, and will be of interest to many:

TERMS OF ADMISSION.

Candidates for admission must be fourteen years of age, and pass a satisfactory examination in reading; arithmetic, through decimal fractions, English grammar, to syntax. Classes are started at the beginning of each year in Drill in Arithmetic and Drill in English; and the pupil must have the knowledge above indicated, else he will be unable to retain position if admitted.

Pupils will be received at any time during the year, if able to pass an additional examination upon these subjects studied by the classes which they expect to enter. But they will find it to their advantage to be present at the opening of each term, or as soon thereafter as possible.

EXPENSES.

In the department of Instrumental Music, the usual fee is charged for the use of pianos and organs. Male students taking either Printing or Telegraphy are charged \$1 per month for the use of instruments. With these exceptions, there are no charges whatever for attendance, either in the shape of tuition or contingent fees. Furnishing an absolutely free education is as much as can be asked; and the Institution neither boards, clothes, nor supplies the student with text-books. Boarding can be obtained in private families at from \$3 to \$4 per week. Washing costs from seventy-five cents to one dollar per dozen. Text-books, which can be procured in Manhattan, cost from \$3.50 to \$5 per term.

No student need expend over \$5.50 per week and many of our best students are living at from \$3 to \$4 per week. Students desiring to "board themselves" can do so at from \$1.25 to \$3 per week. In a club of four young men, renting a house, the average cost to each for the term was \$1.11 per week.

LABOR.

Manual labor by the students may be for either of two purposes: First, to acquire skill in a given art; second, to earn money. In the first case, the labor is educational; in the second, it should be paid for by the party benefited.

Educational Labor.—Manual labor in the recitations of the Industrial Department, like mental labor those of the Literary Department, is purely educational, and will not be remunerated. While the interest of the student is held paramount in the direction of this labor, the practice necessary to dexterity will be required.

Remunerated Labor.—When the Institution needs labor on the Farm or elsewhere which is not educational, but simply for its own prof-

it, and which a student is willing and able to perform, it becomes an employer instead of a teacher, and he an employee instead of a scholar. It pays for work; he works for pay. The relation between them is commercial, not educational; and both parties must act upon business principles. Hence, the College will only furnish such employment as its own interests require, and will pay according to the value of the services rendered at from seven to ten cents an hour.

It is impossible to say how much any one can earn, since that depends on what the student can do and what there is to be done. Some are making one-half their expenses, some the whole, and exceptional men have made more than expenses. As a rule, a faithful boy skilled in farm work can earn half his expenses by entering the Labor Class of Practical Agriculture. During the year he can ordinarily acquire sufficient skill in the wood or iron shops to enable him to make articles for sale. The whole question is one for his own consideration and decision; and he should not be too sanguine. We can teach all who come but it is impossible for us to promise anything more. Hitherto we have refrained from holding out strong inducements respecting the amount of labor we might have to offer; but in view of the fact that during the last three years we have had more to do than the students could perform, we are inclined to give more encouragement on this point. Any boy who is in dead earnest, who is familiar with farm operations, and who can raise \$50 to start with, should be able to carry himself through the four years' course.

TO NEW STUDENTS.

Bring the text-books you have been using. On arrival, first arrange for your boarding. A. A. Stewart, Sup't Printing Department, will furnish information, either by letter or application, concerning boarding places or rooms for rent. Report to the President at 8:30 A. M., immediately after chapel, for enrollment.

For further information apply to John A. Anderson, President, Manhattan, Kansas.

FEEDING CATTLE.

A correspondent of the Rural Sun gives his experience in feeding cattle as follows: If they are sometimes stuffed and at others starved, they will soon go through the process of "eating off their heads." In feeding meal, I always want it ground fine, as my experience is that three bushels of fine meal is equal to four ground coarse, though an over feed of fine meal will scour worse than the coarse; this the feeder must guard against. Always give each one a box to himself, so you know he eats what you feed him, and always accustomed them to being tied up from calves; if this is not convenient when you begin to feed, tie them up at night and let them run loose in the lot of a day. Keep them well bedded, and never allow a hog in their stalls, or you will lose much of the manure they make, and that with me is a big item. When your stall begin to get too hot to be healthy, clean out and haul directly to where you want the manure.

In commencing to feed, if you intend to feed five or six months, don't feed too heavy at the start, but gradually increase so as not to cloy them, as it is difficult to make profit on one

that has been over-fed or founded. For two years past I have been turning mine off at two to two and a half years old, at from \$68 to \$78, and always with satisfaction to myself and all parties who handle them.

I once tried a three-year-old scrub steer until he was four years old, with a lot of young graders. The graders made a gain of 615 pounds in ten months and two days, and the scrub made 485 pounds in the same time; and through the feeding season he ate three pounds more of meal per day than any other in the lot, and I think full as much hay, though that was not weighed. He weighed at four years old 1,406 pounds, and sold at 4 1/4 cents per pound, while the two and two and a half year olds averaged over 1,400 pounds, and sold at 5 cents. In feeding, a few rutabagas are a great help. Hay and cornfodder fed alternately are better than either alone. In my opinion, no farmer who feeds grade Short-horns judiciously, and takes care to get the benefit of manure, will ever need credit. As for scrubs, fight shy of them; for if the market is dull and slow you are compelled to sell for less than they cost you, and seldom, under any circumstances, at a profit.

ORLOFF HORSES IN AMERICA.

It was not until the Paris Exhibition of 1867 that Europe generally was made acquainted with the merits of Orloff horses. During the races which added to the excitement of that festive season in the gay capital of France, a Russian horse named Bedouin, belonging to the Orloff family, started all, except American visitors mindful of the speed of our own ratters, by trotting a mile in 2:30 1/2. Some years ago, Mr. Williams, the Baltimore millionaire, who had made most of his wealth in Russia, imported into this country some Orloff horses, and last year during our Centennial big show, an additional interest was aroused in regard to this breed by an offer of prizes amounting to ten thousand dollars for a race, to take place in October, between American and Orloff trotters. As circumstances prevented this contest at the date mentioned, the offer has lately been renewed for next October by the original donors of the prize the Turf, Field, and Farm, our most trustworthy authority on turf matters, and the paper that has been foremost in enlightening the public on the history and qualities of this remarkable race. A few weeks ago several of these were brought into the country, and are now in training, and it is not improbable that we shall soon be able to ascertain by competition the relative fitness of our own, boasted flyers and the stranger.

But although we are by no means disposed to underrate great speed in the equine race, any more than accomplishments, merely ornamental in the human, yet we are very decidedly of opinion that the development of this should never be suffered to interfere with that of far more valuable qualities. It was not from their fitness alone that the Orloffs gained their celebrity, but for a combination of this quality with a powerful display of bone, sinew and servicable size. Smetanka, the progenitor of the race, was sixteen hands high and possessed of such remarkable muscular development and strength of bones that some have doubted that he could have been Arab, and those qualities have been inherited by his descendants. It is unfortunate, perhaps, except in the light of an advertisement, that the importation of this breed into the United States has been used to encourage contests for speed, which in our opinion are too much in vogue. Although, on the ground of their demoralizing tendency, we are not disposed to approve of these, as at present conducted, still our chief objection to them is that the undue regard for fleetness to which they give weight, causes breeders and others to neglect or undervalue more servicable properties. It is, therefore, in the light of possible progenitors of a large, enduring and powerful race of roadsters, servicable also before the plow, that we welcome the arrival of the Orloff among us. The Normans-Percheron stallions have, already greatly improved our equine stock for farm purposes, wherever their services have been employed, and these foreigners may be equally beneficial, though possible more among carriage horses than among those for the cart or the plow.

THE WHEAT PROBLEM.

A Pennsylvania agricultural contemporary advises farmers to hold their wheat for an advance in price. The uniformly fine prospect for a large crop in the great wheat producing area of the West, and the scarcity of old wheat, would lead the farmers to suspect that early prices will be fully as good as later ones. If Europe gets into a general war, it will change the status of prices; but there is little probability of such a state of affairs. It is true, English journals claim that Great Britain will not produce near enough to bread her people. The farmers of those "fortunate Isles" never do! Admitted, the proposition that there is a deficiency this year somewhat more than common; and admitted that France, as is claimed, consumes all the wheat that nation can grow. Admitted that but little can be expected from Egypt; and that none will be received from Turkey—never a wheat exporting country to any great extent—and that Russia will find use for all she can raise. Admitted that the California wheat crop is light as compared with former years. Still, we believe those who sell their crops within the next three or four months will realize more money, taking risks and interests on the crops into account, than those who retain their wheat, under the idea that 1878 prices will greatly exceed those of 1877. Let us remember it takes money to hold crops.

Ed. W. G.

HINTS ON PLANTING, PRUNING, ETC.

CARE OF THE TREES BEFORE PLANTING. It is absolutely necessary that the roots of the trees should be kept moist while out of the ground...

PRUNING

Cut smooth all bruised or broken roots, and shorten the branches by cutting off about half of the last season's growth...

PLANTING

The holes should be dug large enough to receive the roots without bending, and if the ground is hard, dig them larger than necessary...

MULCHING

With decayed straw or coarse litter, half rotten leaves or chips four or five inches deep, and for a space of two or three feet on every side...

CULTIVATION

It is astonishing to see so little attention paid to the cultivation of orchards. A contributor to the Prairie Farmer says: "I recently noticed the orchards in traveling through these parts..."

WATERING

Watering transplanted trees and plants, as commonly practiced, really does more harm than good. When the earth is dry and hot, the application of a little water to the surface...

PROTECTION, ETC.

A belt of forest trees or evergreens on the north and west side of an orchard, as a wind-break, is considered very advantageous...

DEEP PLOWING

The State of Kansas, if not the greatest, is certainly one of the greatest wonders of our time; but marvelous and almost astounding is the fact of its rapid growth...

branches of its productions which is destined to the greatest development, and it is also the one which is most complex.

The State is comparatively young. It is true that it has the advantage of the experience, the instruction, the discoveries and the researches of older States...

1st. From the physical point of view, what is the greatest complaint that we make against this climate? Certainly the extremes of drought and humidity.

The system is formed upon a decimal scale, and is based, in theory, upon an invariable unit of length obtained from nature.

THE METRIC SYSTEM.

MEASURE OF EXTENSION.

Milli, Centi, Deci, Meter-Deka, Hekto, Kilo.

Milli, Centi, Deci, Sq. Meter-Deka, Hekto, Kilo.

Milli, Centi, Deci, Cu. Meter-Deka, Hekto, Kilo.

MEASURE OF CAPACITY.

Milli, Centi, Deci, Liter-Deka, Hekto, Kilo.

Weight.

Milli, Centi, Deci, Gram-Deka, Hekto, Kilo.

1. The meter is 39.37 inches.

2. Meter means measure. Examples—gas-meter, water-meter, etc.

3. A few other names are used: Myria-meter equals 10 kilo-meters; 1 ar equals 1/2 deka-meter of land; 1 ster equals 1 cu. meter of fire-wood; a ton equals 1,000 kilo-grams; the weight of 1 cubic meter of water equals 2,204 lbs.

4. Notation. \$142.85 may be read—14 eagles, 2 dollars, 8 dimes and 5 cents.

It will be readily perceived that the derivatives from the units of each measure are 10ths, 100ths, 1,000ths, for the lower denominations, and 10's, 100's, 1,000's, for the higher.

These reactions, however, are not produced instantaneously, a certain time is necessary.

It is this way that we have got to say that the land is in need of rest, and hence arises the necessity of alternation of the crops.

We work every year double the usual depth of earth, it is evident that we will, in addition to one-half the exhaustion, and that in addition we shall bring in contact with the atmosphere a much larger quantity of mineral elements—

we shall give a much greater scope to the chemical reactions. Moreover, if we cultivate plants whose roots only penetrate to a slight depth...

3rd. We come to the practical point of view. It is evident that there is an undeniable advantage in cultivating a small extent of land in a manner to secure good crops, rather than a large extent in a middling way.

Some additional expense may be incurred for actual plowing, but all the rest of the outlay for general labor will be less in the former case than in the latter, while the crops will be much more certain and more abundant.

I repeat then that doubling the depth of the soil is often better than doubling its extent.

I could enlarge still further on the numerous advantages which are presented by the system of deep cultivation, but I think I have said enough to prove to demonstration its utility...

THE METRIC SYSTEM.

By PROF. ROBERT MILLINER, Emporia, Kansas.

The following address by Prof. M., was delivered at the annual meeting of the State Teachers' Association, which met at Emporia, June 28, 1877, and is taken from the advance sheets of a pamphlet, which will contain the important addresses delivered at that meeting.

The system which I have the honor of presenting, briefly, for your consideration, is one deserving of more attention than it has received at the hands of the American people.

The subject naturally presents itself in the following form:

1st. What is it?

2d. When and where did it originate?

3d. What better is it than our present system of weights and measures, and would we gain anything by the adoption of it in our business?

4th. What means are best adapted to bring it into general use?

The metric system was originally devised and adopted by the French during the latter part of the last century.

It was first introduced in France in 1790, and the standard deposited on the last summer solstice of the 18th century, became the standard of the world.

The system is formed upon a decimal scale, and is based, in theory, upon an invariable unit of length obtained from nature.

The arc of the meridian, starting from the parallel of Dunkirk, in the extreme north of France, and terminating in the parallel of Barcelona, in Spain, was measured under the direction of the most skillful engineers, and from this measurement the quadrant was calculated, and the meter established.

Later measurements and calculations have shown that the measure is slightly inaccurate; not enough, however, to affect its value for all practical purposes.

From the meter are deduced the ar, the unit of land measure, a square, the side of which is ten meters, the ster of solid measure, a cube whose edge is one meter, the liter the unit of capacity, corresponding in use to liquid and dry measure, a cube whose edge is .1 of a meter, and the gram, the unit of weight, a cube of pure water whose edge is .01 of a meter, weighed in vacuum, at a temperature of 4°C, or 39.2° Fahrenheit.

The ar is generally employed in measuring land, and the ster in measuring fire-wood; the square meter in measuring all ordinary surfaces, as floors, ceilings, etc., and the cubic meter in ordinary solids, as excavations, embankments, masonry, etc.

The accompanying chart exhibits all that essentially belongs to the system:

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We work every year double the usual depth of earth, it is evident that we will, in addition to one-half the exhaustion, and that in addition we shall bring in contact with the atmosphere a much larger quantity of mineral elements—

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coombs, noggins, kilderkins, firkins, barrels, butts, pipes, punchions, scruples, drachms, carats, grains, pennyweights, hundred-weights; and many others.

The attention of those interested in the introduction of the system, having been repeatedly called to the diversity and consequent confusion in the common usage, and in standard arithmetics and dictionaries, committees of the American Metric Bureau, of Boston, and of the American Metrological Society, of New York, were appointed to investigate and report on the most approved spelling, pronunciation and abbreviation of the nomenclature of the metric tables.

I have followed the recommendation of the committee and would recommend the same for general adoption.

It would hardly be possible, even if it were considered desirable, to attempt to teach our people the French pronunciation.

The importance of uniformity is so great that even those familiar with the French should not use it, as it would only tend to confuse.

Such pronunciation as song-to-met-er, song-to-le-tr, should not be used, much less song-to-met-er-half French and half English.

You will observe that I adopt the spelling meter, liter, gram, ar and ster, for the primary units; deka and hekto for the Greek prefixes, and the ordinary Latin spelling for the Latin prefixes.

The word meter is so well established in our language that it would be undesirable to attempt to alter its spelling or pronunciation, since we have so many words in the language with this spelling, as diameter, thermometer, gas-meter, etc.

Liter should conform to meter for the sake of euphony. It is dropped from the end of ar and ster, and me from gramme, as being more in harmony with the German, and our own words telegram, epigram, monogram, etc.

I will not detain you to discuss the matter of abbreviations, not but that it is of great importance, but that time will not permit, and will pass to the consideration of the third question—the utility of the system.

The importance of a standard at once invariable and universal, has long been felt.

President Madison said: "The great utility of a standard fixed in its nature and founded on the easy rule of decimal proportions, is sufficiently obvious."

Jefferson declared to reduce "every branch to the same decimal ratio as already established in coins, and thus bring the calculations of the affairs of life within the arithmetic of every man who can multiply and divide plain numbers."

Its simplicity and economy recommend it. A few years ago "the International Association for obtaining a uniform system of weights and measures," in a report to the Chancellor of the British Exchequer, reported that the adoption of the metric system would save in the management of one railroad alone (the London & N. W.) \$50,000 a year, and in the various departments of the British government not less than \$2,500,000 every year.

The following from the Metric Bulletin, of November, 1876, illustrates this feature of the question much more pointedly than I could. I quote:

"We should adopt the metric system because it is the international, and is rapidly becoming the universal system of measurement. In traveling in another country, we change our money for its money.

The same proportionate saving would be effected in every market, store, factory and counting-room, in short in every place where business is transacted, because of the great convenience, not to say necessity, of using the same measure of value.

Our country is more and more in the very midst of the nations in commerce, and convenience and economy require us to use the measure common to all nations.

It would do away with the army of clerks (paid by the people) in the importing, exporting and custom houses, who are now employed in reconciling the weights and measures of one country to those of another.

Beside the vast saving effected, greater accuracy and convenience would be secured, and frequent confusion and perhaps litigation avoided.

With the same money our people could then travel through the world and buy, and in the same denominations with which they are familiar at home.

This is one sufficient reason for adopting the system, as has been shown by the experience of Sweden, whose system, lately abandoned for the metric, from which it was modeled, was quite as perfect, except that it was not in harmony with the other nations.

Educational reasons require us to adopt the system. Illiteracy is growing on us in spite of all the money and effort we are expending.

We find it impossible to do the needed work in the time we have in the schools.

Those most familiar with the whole subject, after careful examination, report that the complete adoption of the metric system, to the exclusion of our so-called compound numbers, would save a year on the school-life of every child sent through our schools.

This reason alone should lead us to incur, if necessary, a hundred times the trouble and expense that would be required in accepting the international measures."

The practical convenience of using a system of notation in harmony with our money is great.

An article sold at two dollars per hundred is to the dullard just two cents apiece.

But at two dollars per gross the cost is apparent only to experts; the majority of people must take out their pencils and make a calculation to be sure of how much they are paying apiece.

The progress being made in the adoption of the system, is sufficient to cause us to give it our most earnest consideration.

The system is in use in nearly all civilized countries except Russia, Great Britain and the United States.

In 1804 the system was legalized in Great Britain, and in 1860 in the United States.

The last decade has witnessed great progress in this direction. It is in use by the Swiss, Swedes, Spaniards, Germans, Austrians, Italians, Portuguese, Dutch, Danes, Belgians, Greeks, Mexicans, Brazilians, and by nearly all of the South American States and British India.

In the medical profession the system is gaining ground rapidly, on account of the great convenience in writing and compounding prescriptions.

Medicine is of so cosmopolitan a character that a prescription from any one of the score of countries using the system, finding its way to the note-book of the physician of another, can be compounded by the druggist without spending an hour in attempting to untangle its mysteries.

The makers of spectacle glasses have adopted the metric system in the numbering and grading of their glasses.

Before this adoption it was necessary not only to know the number of the glass, but in what country it was ground.

The American Watch Company, of Waltham, Mass., employing 900 hands and turning out about 350 watches a day, have made a complete adoption of the metric system.

Amherst College has taken an advanced position on the metric system. They have not only voted in common with their first-class institutions to make a knowledge of the system a requirement for admission, but they propose to make their students familiar with the actual use of the system.

The heads of all the departments of the sciences have agreed to use metric denominations in their lectures and instruction. Examples of its progress might be multiplied indefinitely, but I think these are sufficient to show the advantages that would accrue from its general adoption.

Strange that our nation, which in 1776 commenced a career of progressive policy which led soon afterward to the construction and adoption of an admirable decimal system of coinage, should not at that time have adopted a decimal system of weights

and measures, as Jefferson desired; but it is more inexplicable still that at the great Centennial Exposition of 1876, the antiquated system should be found still prevailing, in unpleasant contrast with the admirable scale by which the French, German and other nations measured and weighed their goods.

The Exposition has given a new illustration of the importance of teaching the system in our American schools. Nearly all textile fabrics exhibited from the countries of Europe, Mexico and South America, were metrically measured, unless in accommodation to our ignorance they were translated into English. The same arguments, used centuries ago against the introduction of the Arabic in place of the Roman numerals used in England, are to-day brought forward by the people of the United States and England against this system of weights and measures.

England was 400 years behind the continent in adopting the present arithmetic. It can hardly be possible that so great a conservatism will be shown in regard to the adoption of the metric system.

The means to bring it into general use will be apparent. Every teacher should thoroughly inform himself concerning the matter. He should know the system and its history; the defects of our so-called system; the origin and progress of the system and the extent to which it has been adopted by other countries; and is used in our own, and the efforts that are being made to secure its complete adoption.

There is so little to learn—one number and eleven words—and so little time is required to learn it, that its very existence as a matter of study is apt to be forgotten and its importance undervalued.

The teacher should have some bits of apparatus, such as have proved so efficient in teaching the system in other countries where it has been introduced. The following from a pamphlet on this subject, by J. P. Putnam, gives the system of instruction pursued in Germany:

"Nothing can give so lasting and correct a conception of a thing as the direct view of it in its actual proportions. With this principle in view, the present advanced system of instruction in German schools aims at combining as far as possible with verbal explanation, the actual exhibition, either by drawings or by models, of the object to be taught.

In this way much time and trouble is saved.

Just before the metric system was enforced in Germany, a committee of teachers was called together for the purpose of determining the best method of familiarizing the public with the metric values.

The following was one of the most excellent methods largely adopted in the schools:

"By this method no comparison between the old and new systems is necessary to explain the metric values, and no geometrical knowledge is presupposed.

The work is done by bringing models of the new weights and measures directly before the eyes of the student, and explaining their relations to each other. In order to accomplish this, a certain amount of apparatus is necessary.

There is required, first, what the Germans call a 'schulometer'; second, a large chart giving a full size drawing of the square meter, with its various subdivisions; third, a chart; fourth, a deci-meter cube, which can be taken apart and resolved into its component centi-meter cubes; fifth, a hollow cubical box made of tin, and large enough to contain exactly the above-mentioned deci-meter cube, to illustrate the measures of capacity, both dry and liquid, and the relation of the same to the measures of length and volume.

Being made to contain exactly a cubic deci-meter, this box represents the liter, and when filled with water its weight represents a kilo-gram. Thus the mutual relations of the weights and measures are seen at a glance, and the impressions produced are positive and permanent.

The metric values and the whole principle of the system may be well taught in an hour with this apparatus. Without it, to attempt to convey a clear idea of the new values by numerical comparison with the old, is a tedious and unsatisfactory task, expensive of time, and productive of no permanent results. It gives us numbers, but no ideas.

"We should also have at hand a hollow tin dekaliter, which, filled with water, will give us the hekto-gram; a hollow centi-liter, to illustrate the deka-gram; and a hollow milli-liter, or hollow centi-meter cube, to illustrate, and filled with water, the gram or unit of weight.

"The 'school-meter' is a piece of wood one meter long, three centi-meters wide, and three centi-meters thick. One side is left clear, without division marks, and represents the meter length. The second side is subdivided into ten equal parts or decimeters, painted in colors alternating light and dark.

The third side shows, in addition to the deci-meters, the further sub-divisions of centi-meters; the first light-colored deci-meter being divided up into centi-meters alternating black and white; and finally the first white centi-meter is again subdivided into alternating black and white milli-meters.

The fourth and last side is divided like the milli-meter used in actual measurements.

"By means of this device a large class may be instructed at once, as the colors and peculiar arrangement of the subdivisions allow even the smallest of them to be distinctly seen from a great distance."

If this apparatus cannot all be supplied at once, the ingenious teacher will be able to obtain portions of it from time to time.

The 'school-meter' might be constructed by the older pupils in a school—a work which would leave nothing for them to learn about it afterwards.

The blackboard should be freely supplied with meter-sticks for rulers and pointers. All blackboard drawings and diagrams should be in metric denominations. The children should be encouraged to measure the play-ground, desks and windows. They should be taught to pace the distance from home in meters, and in other ways get tangible ideas of metric quantities.

The simplicity of the thing will strike every pupil. The parents will become interested and learn it from the children, and its adoption will follow this general knowledge as a matter of course.

Charles Sumner says of it: "The rising generation will embrace it, and ever afterward number it among the choicest possessions of an advanced civilization. A system of weights and measures born of philosophy rather than of chance, is what we now seek. To this end old systems must be abandoned. A chance system can not be universal. Science is universal; therefore what is produced by science may find a home everywhere.

The metric terms are intelligible in all languages. They are in their nature common or cosmopolitan, and in all countries the name instantly suggests the measure with exquisite precision."

John Quincy Adams, in his report to Congress, more than a quarter of a century ago, with words prophetic of what we are soon to see, says:

"If man upon earth be an improvable being; if that universal peace which was the object of a Saviour's mission, which is the desire of the philosopher, the longing of the philanthropist, the trembling hope of the Christian, is a blessing to which the futurity of mortal man has a claim of more than mortal promise; if the spirit of evil is before the final consummation of things, to be cast down from his dominion over men, and bound in the chains of a thousand years—the forestake here of man's eternal felicity—then this system of common instruments to accomplish all the changes of social and friendly commerce, will furnish the links of sympathy between the inhabitants of the most distant regions.

The meter will surround the world in use as well as in multiplied extension, and one language of weights and measures will be spoken from the equator to the poles."

Patrons of Husbandry.

STATE GRANGE DIRECTORY.

Master, Wm. Sims, Topeka, Shawnee Co.
Overseer, J. F. Wilkins, Lawrence, Douglas Co.
Secretary, J. T. Rippey, Lawrence, Douglas Co.

EXECUTIVE COMMITTEE.

M. E. Hudson, Mapleton, Bourbon Co.
W. H. Jones, Holton, Jackson County.
Levi Durnauld, Hartford, Lyon County.

DEPUTIES.

The following named persons have been appointed Deputies for their respective counties, and are hereby authorized and empowered to perform all the duties of their said office in any other county of this state.

greater concert of action, can be secured than in any other manner, and fourth, because it is a part of our organization, and its office, at this time, in view of the very general interest being taken in our business relations, is an important one.

The State Grange, in connection with the State Agricultural Association and other similar bodies, met at Anderson the 8th and 9th and 10th inst. in the Fair grounds.

Every Grange has a few earnest, active members. Every Grange has a few unenterprising drones. The former have no cause for discouragement, for the latter are always to be expected, and the Grange must, like every other organized social body, pass through the stages of reaction, trial and discouragement, before it settles down to its permanent work.

Another Grange case has been decided by the United States supreme court. The Chicago Burlington & Quincy railroad company were the plaintiffs in error, and they contested the constitutionality of the railroad law of Iowa.

himself a workman, of limited means; but on the application of the strangers, his natural urbanity of manner prompted him not only to show all that he had, but to enter into a detailed explanation of the working of his establishment, and of the very superior manner in which he could conduct his factory.

The above clipping is the more interesting to me from having had the princely mansion pointed out some years since, while on a visit to Philadelphia.

Boys and girls, especially, should cultivate the habit of being civil and polite to all; to all old and young, rich and poor, beautiful and homely; to such as are meanly clad as well as those who are finely apparelled.

Plasket's Baldwin City Nursery.

Everything in the Nursery line. Good supply of Ben Davis, Winsap and Misouri Pippin Apple trees, Amesen June Peach, and all leading and best varieties.

The Farm Department STATE AGRICULTURAL COLLEGE OFFERS FOR SALE YOUNG SHORT-HORN BULLS of the highest breeding, together with JERSEYS and GALLOWAYS.

GREAT PUBLIC SALE OF LIVE-STOCK, SPRING VALLEY FARM, On Wednesday, September 5th, 1877.

NOT Purchase any article until you have our new Catalogue. Great reduction in prices. Free to any address.

BERKSHIRE SWINE. The undersigned having had many years' experience in the breeding of FINE HOGS, desires to call the attention of English and American breeders to our fine herd of ENGLISH BERKSHIRE SWINE.

GIDEON BAILEY, Tipton, Cedar Co., Iowa. BREEDER AND SHIPPER OF PURE BLOODED Poland-China Hogs.

Trees!! Trees!! PARK NURSERY LAWRENCE, KANSAS. P. P. PHILLIPS, Proprietor. 21st. Year in the State.

BERKSHIRES! Broad backs, heavy hams and shoulders, short legs and heads, abundant hair, good constitutions, with purity of blood, and good size combined with early maturity, make my BERKSHIRES unsurpassed. I breed but a few and those of the best.

Breeders' Directory.

E. T. FROWE, Wamego, Kansas. Breeder of Bucks for sale this year. HALL BROS.'s Ann Arbor, Mich. make a specialty of breeding the choicest strains of Poland-China, Suffolk, Essex and Berkshire pigs.

WARREN HARRIS, Trenton, Missouri, Breeder of Short-Horn Cattle with Herd-Book pedigree, also Pure Red Berksires. Correspondence solicited and promptly answered.

JOHN W. JONES, Stewartville, Mo., breeder of Thoroughbred Short-Horn Cattle of approved blood and pedigree. Also, breeder of Berksires of the best strains in the United States and Canada.

W. W. ESTILL, LEXINGTON, KY. PROPRIETOR OF Elmwood Flock of Cotswolds, From imported Stock. Young Stock for Sale.

Nurserymen's Directory. STRAWBERRY PLANTS.—The new ones at reduced rates. Send for price list to SAMUEL MILLER, Sedalia, Mo.

W. W. ESTILL, LEXINGTON, KY. PROPRIETOR OF Elmwood Flock of Cotswolds, From imported Stock. Young Stock for Sale.

General Business Directory. SHERMAN HOUSE. The old reliable Granger's Hotel, opposite the court-house, Emporia, Kan. J. GARDNER, Prop. Terms \$1 per day. Live and let live.

Attorneys at Law. J. SAFFORD, Attorney at Law, 203 Kansas Ave., Topeka, Kansas.

Dentists. A. H. THOMPSON, D. D. S., Operative and Burgeon Dentist, No. 159 Kansas Avenue, Topeka, Kansas.

DISTRICT AND COUNTY GRANGES.

EDITOR FARMER: As there seems to be some difference of opinion among our membership as to the importance, powers and duties of our county Granges, permit me to say a word in favor of this, the connecting link between our subordinate and State Granges.

The National Constitution, as originally adopted, made no provision for the organization of County Granges; in fact, made no provision for the development of our business relations, and the membership at once discovered this defect, as evinced by the organization of "County Councils,"—business associations unknown to our law—and they served their time and purpose, until, in answer to the demand of the membership, the National Grange, by an amendment of its organic law, provided for the establishment of "District or County Granges," and directed that such organizations should "have charge of the educational and business interests of the order."

While it has been claimed by some of our best members, that county Granges are not essential in the development of our business plans, our experience proves them to be the best medium through which to disseminate all that kind of information calculated to promote the welfare of our fraternity in all matters relating to our "educational and business interests."

I have no hesitancy in recommending the organization and maintenance of county Granges. First, for the reason that I believe them eminently suited to the work assigned them. Second, because as a connecting link, and means of communication between the subordinate and State Granges they are convenient and valuable. Third, because I believe that greater uniformity will be secured in the organization of our business enterprises if gotten up under the supervision of the organization charged with that work. Fourth, because through their agency, greater interest, hence

Educational.

POLITENESS, A PATH TO WEALTH.

BY JOHN D. KNOX, Topeka, Kansas.

Here find a newspaper clipping on civility and success, full of words of wisdom: A correspondent of the New York Evening Post, referring to the attendance of Ex-President Van Buren on the funeral occasion of Mr. Marcy, says of him that the same gracious manners, the same pleasant address, and the same smiling countenance, that had always belonged to him, are still his, and that they win instantly upon the admiration of all who come in contact with him.

Kind words, kind looks, and kind deeds are imperishable seeds of love, and life and health and wealth, watered by the friendly dews of Him who said: "He that giveth a cup of cold water to a disciple in the name of a disciple, shall not lose his reward."

PATRONS' MUTUAL AID SOCIETY OF PENNSYLVANIA. Will issue a \$1,000 Policy for \$2.50 each admission fee. There are two classes of 4,000 members each. A class from 18 to 40 years, a class from 40 to 60 years no yearly assessments. The only additional expense will be the payment of one dollar when a member dies out of his or her class.

WHOLESALE OR RETAIL. I should like to trade nursery stock and property at Lawrence or other localities for a No. 1 tract of land near some live Kansas R.R. Town. Address P. P. PHILLIPS, LAWRENCE, KANSAS.

Educational.

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The Kansas Farmer.

J. K. HUBBARD, Editor & P. operator, Topeka, Kan.

STATE FAIRS, EXPOSITIONS &c., &c.

- American Institute, New-York, Sept. 12, Nov. 1877
American Zoological, Baltimore, Md., Sept. 12, 14
California, Sacramento, Sept. 17, 20

DISTRICT AND COUNTY FAIRS IN KANSAS.

- Allen Co. Agr'l and Mecl. Ass'n., Humboldt, Oct. 2, 5
Anderson Co. Agr'l Society, Garnett, Oct. 3, 4 & 5
Barton Co. Agr'l Ass'n., Great Bend, Oct. 3, 4, 5

THE KANSAS FARMER PRINTING HOUSE.

The Kansas FARMER Book and Job Printing House is prepared to execute in the best style...

AN EXCELLENT EDUCATIONAL PAMPHLET.

Prof. A. B. Lemmon, State Superintendent of Public Instruction, was elected President of the State Teachers' Association...

THE KANSAS CITY EXPOSITION FOR 1877.

The Kansas City Exposition is the Great Fair of the far West. The people of Kansas and Missouri go there to see the finest and largest displays of farm products...

The Shooting Tournament commences this day at 9 o'clock A. M. for the liberal purses offered for double and single bird shooting...

All entries except in Live-Stock rings close this day at 12 o'clock M. No entry fee is charged in any Department...

TUESDAY, September 18, 1877. A. M. Alderney Cattle, Fat Cattle, Horses of all Work, Shooting Tournament at 9 o'clock. Grand Flowering Match for Gold Medal at 10 o'clock.

At 12 o'clock, grand opening meeting of the Exposition. Addresses by distinguished speakers from Kansas and Missouri.

WEDNESDAY, September 19, 1877. A. M. Devon Cattle, Sweepstakes Young Herd, Roadster Horses, Saddle Horses, Mules and Ponies.

THURSDAY, September 20, 1877. A. M. Short-Horn Cattle, Draft Horses, Sweepstakes Trotting Stalls. Test of Horses in actual operation at 9 o'clock.

FRIDAY, September 21, 1877. A. M. Sweepstakes, Bulls, Cows and Heifers, Thoroughbred Horses and Sweepstakes Exhibitions of Bred and harding at 9 o'clock.

SATURDAY, September 22, 1877. A. M. Sweepstakes Horses, and Grand show of premium stock. 11:30 Running Race, \$150, for two-year-olds.

Sunday, September 23, 1877. A. M. Sweepstakes Exhibitions of Bred and harding at 9 o'clock. Bag Race at 12 o'clock.

Crops, Markets & Finance.

Opinions, Facts, and Figures from Various Sources.

Reno County.

Aug. 24.—We have had regular rains about when needed this month which has caused corn to fill well and the yield will be the greatest ever had in this part of Reno county.

Chv. County.

Aug. 22.—It may be interesting to some of your sheep raising subscribers to learn what we are doing here in that line. I visited the flock of Edward Jones a day or so ago and found some splendid bucks two-year and one-year old...

Republic County.

Aug. 16.—This part of the footstool is flourishing finely. Best crops of corn is as good as ever before. A fine rain to-day will do much good. The grasshoppers have been flying south several days.

THE FUTURE STOCK FIELDS.

The Black Hills Pioneer says: "The subjugation of the Sioux Indians opens up to occupancy the finest stock ranges of the continent, and the enterprising stock-raisers of the country have already moved towards utilizing them.

SHIPPING VALUES.

We clip the following by permission from the circular of J. H. Drake & Co. Cash wheat at \$1.16 with intermediate charges 14 1/2%, would cost \$1.80 1/2 alongside ship; with 6s sail freight and 2 percent commission on the currency value, about 48s off

the coast. August wheat at \$1.64, with estimated intermediate charges 17c, would cost about 48s 6d off coast.

Cash corn 44 1/2c, intermediate charges 12c, would cost 56 1/2c alongside ship; with sail freights 6c, 2 percent commission on the currency value, would cost about 25s 7d off coast.

THE SUPPLY OF HOGS.

There is hardly any doubt at the present time, but what we are to have a considerably increased supply of hogs for the coming fall and winter trade, over what we had for the last fall and winter.

CONSUMPTION OF CORN.

The following figures show how steadily the consumption of corn is increasing in the United Kingdom. During 1876 there were 1,390,780 bushels, against 791,078 bushels in 1875.

Table with 3 columns: Place, 1877, 1876. Lists cities like Cincinnati, Chicago, Indianapolis, St. Louis, Cedar Rapids, Milwaukee with their respective consumption figures.

FOOD SUPPLY FROM AMERICA.

The quantity of fresh meat landed at Liverpool last week was considerably in excess of arrivals for many weeks past, amounting to 8085 quarters of beef and 150 carcasses of mutton.

The newest industrial feature in the world.

is the introduction of Kansas land owners of the contract system in raising wheat. Large contracts of prairie are broken, seeded and harrowed by the poorer emigrants for the older settlers at a fixed price per acre.

Mr. Pierce, south of Iowa Point has three orchards—about 800 trees, 300 of which are twenty years old.

He will gather this year about 3000 bushels of apples, and has already sold over \$100 worth of early fruit. His trees are healthy and doing well, and the old gentleman is as proud of them as any one well can be...

the storm came from the north-east and was a few miles in width. It fell to the depth of 6 inches, utterly destroying the corn crops in its course, breaking windows and injuring stock more or less.

THE GROUND WAS NEVER IN BETTER CONDITION THAN NOW FOR PREPARING FOR WINTER WHEAT.

The rain last Monday night was hailed with delight by the farmer, and we understand there will be a larger area sown in wheat in Northern Shawnee county, this fall than ever before.

Sen. Plumb is preparing to put in 700 acres of wheat.

He had 400 acres last year which did not yield very well, but he proposes to prove his faith in Kansas by putting in nearly double that this year.

varieties prized by Mr. Pierce, are the White Winter Pearmain, Winesap and Jeneting.

Mr. H. N. Simmons informs us that his Odessa (spring) wheat yielded 25 bushels per acre. He thinks the grasshoppers damaged it one-fourth. We have heard of it yielding 90 to 85 bushels per acre and some claim that it will do well if sown in the fall.

James Parker, living some 10 miles north, in Walnut Grove township, raised 30 acres of oats which yielded 1,300 bushels—an average of over 43 bushels per acre.

Last Thursday afternoon, a dense, dark cloud gathered north of the Neosho and extended southward of that stream leaving desolation in its track.

J. Q. Cowee of Grand Haven, has left with us a peck of as fine apples as we have ever seen in the State.

The grain market this week has revived very much in quantity, but declined in price some. No. 2 is worth ninety-five cents; No. 3, eighty-five cents; No. 4, seventy-five cents.

The farmers are both happy and busy, and everybody rejoices over the certainty of heaviest crop ever raised in the county, and the fact that next year will largely "discount" all former years in the production of wheat.

Today the tide of emigration has flooded the country so that the most desirable of the government land is taken up to a line extending from Garfield on the A. T. & S. F. R. R. through Rush Center and Laconce, north to Hays City on the K. P. and west of this is a vast uncultivated tract of 11,600 sections, 46,400 farms, of 160 acres and capable of supporting 223,000 inhabitants besides the towns and villages that will spring up through the country.

G. L. Blood, from near Douglass, Butler county, on the Walnut river, brought to this market, on Monday, a load of the nicest and most delicious peaches we have seen this year.

At a meeting of the Douglas County Horticultural Society as reported in the Lawrence Journal, Mr. Watt said regarding the fruit crop:

The crop this season is too heavy for home consumption, and it is time to turn our attention to the matter of an outlet for this abundance, and the best manner of preparation for shipping.

Mr. O. H. Ayers—My blackberry plantation has done remarkably well. From one-quarter of an acre of Kittingany I have already marketed 1,000 quarts, besides a small amount used in my family—average twelve cents per quart.

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When the time arrived for harvesting white winter wheat, many hesitated before cutting in fields which had the appearance of being affected by rust or blight—a number even letting the grain stand and finally burning it.

There were the finest specimens of fruit exhibited at the Horticultural meeting here last Saturday that we ever saw. W. D. Barnett exhibited the Tradescantian Crab, the Hyslop Crab, and Montreal Beauty, all of which were excellent and as fine in shape, size and favor as any fruit of the kind grown in the United States.

On Thursday, the 4th day of October, there will be held near Burlington, a fair for one day, under the supervision of Pomona Grange of Coffey county.

The wheat average of Ellis county may be certainly state twenty bushels per acre. This is from five to eight bushels above this year's average of the State.

A man with a large family and a small income need not fear starving in this country. He can go into market and buy a nice bowl of fat beef at 6 cents per pound; new potatoes 50 cents per bushel; onions \$1.50; roasting ears 5 cents per dozen; eggs three dozen for two bits; cucumbers, tomatoes, cabbage, beets string beans, etc., 25 cents per basketful; peaches \$1.25; apples \$1.00.

An adjourned meeting will be held at the court house in Iola on the last Saturday in August at 2 o'clock P. M., for the purpose of perfecting the organization of the Southern Kansas Wool-Growers' and Sheep-Breeder's Association.

New York Money Market.

GOLD—Opened at 104, declined to 104, and closed 104...

Kansas City Produce Market.

WHEAT—Steady and fairly active; No. 2, \$1.18 spot...

New York Produce Market.

Flour—Higher; superfine western and state, \$4.10...

St. Louis Produce Market.

Flour—Inactive and lower; fall XX, \$4.60 to 5.25...

St. Louis Live-Stock Market.

Hogs—Steady; packers \$5 to \$5.40; bacon and heavy...

Chicago Produce Market.

Flour—Steady and unchanged. Wheat—Unsettled but generally higher...

Baltimore Grain Market.

Corn—Western firm and higher; western mixed spot...

Topeka Retail Grain Market.

Wholesale cash prices by dealers, corrected weekly by W. Edson...

Topeka Produce Market.

Grocers retail price list, corrected weekly by J. A. Lee...

Leather Market.

Corrected weekly by Hartsock & Gossett, Dealers in Hides, Furs, Tallow and Leather...

Topeka Lumber Market.

Corrected weekly by Jno. H. Leidligh...

Topeka Butcher's Retail Market.

Beef—Striploin steak per lb. 12 1/2. Round 10. Roasts 10...

Superstition.

A panacea, or "cure-all," is one of the myths of the age of superstition...

HOW

to transfer pictures from paper to glass plates...

SMITH BROTHERS' BORAX

Warranted Perfectly Pure. In one pound packages...

THE KANSAS CITY EXPOSITION FOR 1877

Will be held Sept. 17, 18, 19, 20, 21 & 22...

Excursion to the Rocky Mountains

The Atchison Topeka & Santa Fe Railroad has arranged with the various railroad lines...

"THE GOLDEN BELT" ROUTE

The quickest, safest and most reliable route to all points East or West is via the KANSAS PACIFIC RAILWAY...

EUROPEAN Larch Seedlings

Scotch Pine, Norway Spruce and White Ash for fall planting...

NEW ADVERTISEMENTS.

Nursery Stock.

THE LARGEST AND FINEST STOCK OF TREES AND PLANTS IN THIS COUNTRY.

SMITH & POWELL

Complete, Invaluable Agency wanted. Send stamp for H. VAN & CO., Chicago.

LADIES' FRIEND

Complete! Invaluable! Agents wanted. Send stamp for H. VAN & CO., Chicago.

IMPORTED NORMAN HORSES

Edillon & Co., Normal, McLean Co., Ills.

HOW

to transfer pictures from paper to glass plates...

SMITH BROTHERS' BORAX

Warranted Perfectly Pure. In one pound packages...

THE KANSAS CITY EXPOSITION FOR 1877

Will be held Sept. 17, 18, 19, 20, 21 & 22...

Excursion to the Rocky Mountains

The Atchison Topeka & Santa Fe Railroad has arranged with the various railroad lines...

"THE GOLDEN BELT" ROUTE

The quickest, safest and most reliable route to all points East or West is via the KANSAS PACIFIC RAILWAY...

EUROPEAN Larch Seedlings

Scotch Pine, Norway Spruce and White Ash for fall planting...

GRAPE VINES

Small, medium and large varieties of grape vines...

OPIMUM SKIN DISEASE

Thousands already cured without tapping. State your age, location of swelling...

DROPSY REMEDY

Challenge Mill Co., Batavia, Kane Co., Ill.

EVERY Farmer Should HAVE ONE

Challenge Mill Co., Batavia, Kane Co., Ill.

CHALLENGE MILL CO.

Batavia, Kane Co., Ill.

25 ELEGANT CARDS

No. two alike, with name 10c. post-paid.

50 Fine Bristol Cards

No. two alike, with name 10c. post-paid.

FULTZ WHEAT

I would call the attention of the wheat growers of Kansas to the Fultz wheat...

MARSH-WIND MILL

The only Mill with Graduating Crank that gives a longer and shorter stroke...

THE CORR SULKY PLOW

Has independent Crank Axles, by which it can be raised or lowered...

THE RIDING CULTIVATOR

Is the acknowledged champion of the corn field...

DOWN WITH HIGH PRICES

CHICAGO SCALE CO., 68 & 70 W. Monroe St., Chicago Ill.

\$20 Reward

Strayed or stolen between the 5th and 15th of August a sorrel horse...

THE WONDERFUL MOWER

The Eureka Center-Draft Mower. Cuts 5, 6, 7, or 8 Feet.

TEXAS CATTLE SALE

Nine Herds mixed cattle now on fine grass in Western Kansas...

EUROPEAN Larch Seedlings

Scotch Pine, Norway Spruce and White Ash for fall planting...

ROSES and GERANIUMS

New, rare, and popular sorts. Send for description and price-lists—free.

Economy Hay and Cotton Press

This is the most direct, portable and cheapest press in use...

SIMMONS LIVER REGULATOR

ASK the recovered dyspeptics. Bilious sufferers, victims of Fever and Ague...

PURELY VEGETABLE

containing those Southern Roots and Herbs, which an all-wise Providence has placed in countries where Liver diseases most prevail...

THE SYMPTOMS of Liver Complaint

are a bitter or bad taste in the mouth; Pain in the back; Sides or Joints, often mistaken for Rheumatism...

Sometimes many of these symptoms attend the disease...

at others very few; but the Liver, the largest organ in the body is generally the seat of the disease...

Manufactured only by J. H. ZEHLIN & CO.

MACON, GA., and PHILADELPHIA, Pa. Price, \$1.00. Sold by all Druggists.

H. T. HEMBOLD'S CONCENTRATED FLUID EXTRACT

BUCHU.

CARMINE WRAPPERS AND LABELS.

Owing to spurious articles palmed upon the public for the past five years...

The genuine, from my original recipe, is printed in carmine ink...

H. T. HEMBOLD Manufacturing Company

NEW YORK.

H. T. HEMBOLD

KANSAS Farmer Printing House.

4-ton Hay Scales, \$60; old price, \$100. All other sizes at a great reduction...

Pamphlets, Circulars, Letter Heads, Cards, Briefs.

Blank of all Kinds. And all classes of FINE COMMERCIAL PRINTING...

Estimates on book and pamphlet work furnished without charge.

J. K. HUDSON

TOPEKA, KANSAS.

Literary and Domestic.

EDITED BY MRS. M. W. HUDSON.

AUTUMN SICKNESS.

Between the middle of August and the middle of September, has in our limited experience...

By the middle of August we begin to hear of bilious and typhus fevers, and dysentery, in different parts of the country...

The truth is we are all debilitated by the heat, and most of us by overeating. We are all sick from the same causes...

Why not begin then, when these little signs of distress which nature exhibits, first show themselves, and try to find out what the trouble is, and stop it.

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doctor prescribed warm corn meal mush, in a large poultice, all over the limb, to be changed seven times in the night...

THE EXECUTIONER'S SOUL.

Translated from the French of Maxime Du Camp for the FARMER.

BY FANNIE B. COLE.

My father, after being tormented with the obsession of my prayers, at length yielded and bought me an old spinet at a public sale.

If any one had asked me in those days what were the most noble occupations of man, I should unhesitatingly have answered, to read, to listen to music and to ride on horseback.

"We shall never do anything with that boy," he said to my mother; "he will disgrace us."

This is a case in which it might well be said, *Ou diable le point d'honneur vaut-il se nicher*. Alas! each one has his own standard of honor, and to judge of them all impartially is perhaps as respectable as another.

In process of time manhood came to me bringing its train of dreams and vague aspirations which lifted me above terrestrial things, and carried me beyond the possible.

devoured them. Ah, well! in my solitary rambles along the banks of the river or through the pine woods, with my head inclined forward I listened to my troubled imagination which seemed to tell me all its foolish hopes.

My mother died, and with her departed all joy and happiness from our house. From that time the life of my father became very irregular.

One day my father was brought home on a litter. He had become involved in a dispute in a drinking house and had been severely wounded in the head by a stone.

When the poor man terminated his existence I was twenty-two years of age; I was alone in the world and I was an executioner.

My situation, financially, was not bad. Despite the irregularities of his last years my father left me nearly two hundred thousand francs, which doubtless comprised the savings of five or six generations.

On the Wednesday following my father's death, (it was market day) the peasants came, as usual, to show me their sprains, their dislocated limbs and their tumors...

Being now absolute master of my little fortune, and no longer opposed by paternal authority, I indulged my tastes without reserve. I soon collected a curious musical library, and bought some horses.

An assassination surrounded by dark circumstances was committed in the suburbs of the city. After a long search the culprit was discovered, imprisoned and brought to trial before the court of assizes.

Our philosophers have written volumes to demand the abolition of the death penalty. It

is well, but believe me I know far more about this subject than they, for whatever they may have written not one of them have described it as it merits because none of them have experienced my agony.

The application for pardon was rejected. I felt as though I was to be annihilated when I heard the news.

On the morning of the execution, after a night of which I spare you the details, I prepared everything according to established usage. I repaired to the prison.

TO BE CONTINUED.

STATE NORMAL SCHOOL

EMPORIA, LYON CO., KANSAS.

The fall term of this oldest, and now only Normal School, established by the Legislature and authorized to confer Diplomas, will commence September 10th.

C. R. Pomeroy.

KANSAS

State Agricultural College

Opens August 23, 1877.

A practical and thorough education for the Farm, Orchard and Shop.

No Tuition: No Contingent Fees.

Four Years' Course.

Send for Catalogue to

JNO. A. ANDERSON, President.

Manhattan, Kansas.

EDUCATION, MUSIC, ART.

The Young Ladies' Athenaeum, A University for Young Ladies, and the ILLINOIS CONSERVATORY OF MUSIC, The Great Western College of Music, with its ART DEPARTMENT.

Incorporated Under the Laws of Kansas.

ACADEMY OF MUSIC AND LANGUAGES.

225 KANSAS AVENUE. - TOPEKA, KANSAS.

Mrs. P. AMANDA WASHBURN, Directress.

Full term opens September 26, 1877. Circulars giving full information, terms, etc., mailed free to all applicants.

Mrs. P. Amanda Washburn, Topeka, Kansas.

SEWING MACHINES, AND ATTACHMENTS.

Farmers should bear in mind that every thing in the line of Sewing Machine Attachments, Needles, Oil and the different parts of Machines, are kept constantly on hand at the Singer Office in Topeka.

The following is a list of Machines for which Needles and parts are kept constantly on hand.

Singer, Howe, Bliss, Domestic, Grover & Baker, Wheeler & Wilson, Florence, Wilcox & Gibbs, Weed, Wilson Shuttle, Victor, Romington, Aetna Manhattan, American, Elliptic and Hand Machines.

Office 235 Kansas Avenue. Address, Singer Agency, Topeka, Kansas.

HIT THE MARK

BY BUYING OF E. B. GUILD, Wholesale and Retail Dealer in

PIANOS & ORGANS,

Small Musical Instruments, Sheet Music and Books. Piano Covers, Stools, etc.

Send for Circulars and Price Lists.

TOPEKA, KANSAS.

SLOAN'S CONDITION POWDER. Preparation Compounded upon SCIENTIFIC PRINCIPLES. SHEEP, HOGS, POULTRY.

\$66 A week in your own town. Terms and \$5 outfit free.

\$55 & \$77 A Week to Agents. \$10 Outfit Free.

\$12 A day at home. Agents wanted. Outfit and terms free.

\$5 to \$20 per day at home. Samples worth \$1 free.

25 FANCY CARDS, all styles, with name, 10 cents.

\$2500 A year. Agents wanted everywhere. Business strictly legitimate.

EPILEPSY OR FITS cured by Dr. Ross Epileptic Remedies.

25 ELEGANT MIXED CARDS, with name, postpaid 10c.

50 Fine Cards, Damask, Repp, Etc., with name on.

\$1200 Salary. Statesman wanted to sell our Great Western Gun Works.

50 Fine Bristol Cards, 9 hints, with name, 10c.

65 LARGE MIXED CARDS, with name 10c.

RIFLES, SHOT-GUNS, REVOLVERS, etc. O. D. for examination, all charges paid.

PRESBYTERIAN FEMALE ACADEMY. 48TH YEAR opens Sept. 12th.

A Special Offer TO THE READERS OF THIS PAPER.

Coupons for The Old Reliable Millinery Store.

Mrs. E. C. Metcalf, KANSAS AVENUE.

Grapes! Grapes! I will be prepared to fill orders for Grapes.

6000 AGENTS WANTED. Six new Patent Sewing Machines.

\$70 A Week! At Home! Ladies & Gentlemen.

FREE! FREE! FREE! Make Money.

FARMER BALANCE OF THE YEAR FOR 50c

August 29, 1877.

THE STRAY LIST.

BY AN ACT of the Legislature, approved Feb. 27, 1868, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ninety days after receiving a certain description and appraisement by "forwarded by mail, notice containing a complete description of said strays, the day at which they were taken up, their appraised value, and the name and residence of the taker up, to THE KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice."

Strays for the Week Ending August 29, 1877.

Anderson County—J. W. Goitra, Clerk.
PONY—Taken up by Sarah C. Cottle, Putnam Tp., July 25, 1877, one small sorrel pony, black face, blind feet white, branded B on left shoulder, one weak eye, paces, supposed to be 10 yrs old. Valued at \$20.

Chase County—S. A. Breece, Clerk.
HORSE—Taken up by S. E. Frasier, Falls Tp., June 24, 1877, one bay horse about 8 yrs old, collar black, hind feet white, black hair around top of hoofs, white spot in forehead, about 16 hands high. Appraised at \$25.
Also, one sorrel horse, 4 yrs on nose, white in forehead, about 14 yrs old, about 14½ hands high, brand on right shoulder, collar and saddle marks. Appraised at \$40.

Clay County—E. F. Huston, County Clerk.
COW—Taken up by Wm. J. Gatchell, Exeter Tp., August 11, 1877, one red and white cow supposed to be 5 yrs old. Valued at \$10.
Also, one roan, yearling heifer, no brands. Valued at \$8.

Greenwood County—W. T. Reece, Clerk.
MARE—Taken up by N. F. Hill, Pleasant Grove Tp., July 17, 1877, one bay mare, 5 yrs old, black eye, supposed to be 10 or 6 yrs old. Valued at \$40.

Jefferson County—D. B. Baker, County Clerk.
HORSE—Taken up by G. C. Brown, Delaware Tp., August 24, one bay horse about 10 years old, 16 hands high, hind feet white a little above foot, white spot on nose, few white hairs in forehead, collar and saddle marks, no other marks or brands. Valued at \$60.

Labette County—L. D. Howard, County Clerk.
HORSE—Taken up by James C. Watson, Richland Tp., July 31, 1877, one four-year-old horse, light gray or dun, 14½ hands high, branded X on left hip. Valued at \$50.

Marion County—Thos. W. Bown, County Clerk.
MARE—Taken up by Henry Urnh, Branch Tp., July 2, 1877, one sorrel mare, black face, right eye white, branded B on left hip, supposed to be 15 or 16 years old, 15 hands high. Valued at \$50.

Mitchell County—Lew. J. Best, County Clerk.
COW—Taken up by Elanson Ward, Elder Tp., one red and white cow, branded H on right horn, crop off right ear. Valued at \$14.

Sage County—E. Spaulding, County Clerk.
MARE—Taken up by John W. Jones, Oliver Tp., one 4-year-old bay mare, 14½ hands high, black legs, mane and tail small white spot in forehead, sweetened in right shoulder. Valued at \$40.

MARE PONY—Taken up by G. W. Markly, Junction Tp., one bay pony mare, strip in face, hind feet white, collar marks on shoulder, supposed to be 4 yrs old. Valued at \$25.

Pawnee County—T. McCarthy, County Clerk.
PONY—Taken up by Daniel Kivelen, Garfield Tp., July 28, 1877, one pony stallion, dark brown, star in forehead, branded C K, 10 yrs old. Valued at \$15.

Shoos County—Laf. C. Smith, Clerk.
MARE—Taken up by W. H. Hooper, Paradise Tp., one bay mare 3 yrs old, 18 hands high, branded M on left shoulder, cupped with a heart and branded with a heart on left jaw. Valued at \$20.

Wahawau County—G. W. Watson, Clerk.
HORSE—Taken up by M. Krathens, Alma Tp., one brown horse colt 4 yrs old (broken to work) light mane and tail, left hind foot white. Valued at \$15.

Wilson County—G. E. Butts, County Clerk.
MARE—Taken up by J. N. Harris, Clifton Tp., June 7, 1877, one light bay pony mare with black spots, 5 yrs old, hind feet white, supposed to be four years old last spring. Appraised at \$20.

Woodson County—I. N. Holloway, Clerk.
HORSE—Taken up by Rudolph Orth of Owl Creek Tp., July 8, 1877, one bright bay horse 15½ hands high, 5 yrs old, blind in left eye, white, branded on left shoulder. Valued at \$50.

G. W. STUBBLEFIELD & CO.,



NORMAN-PERCHERON HORSES.
 Imported and Grade Stock for sale on reasonable terms. Parties wishing to buy will do well to examine our stock before buying elsewhere. Correspondence solicited.
Stock Farm in Bloomington, Ill., Madison St., 104 South. Stock Farm Shirlee, Ill.

SHANNON HILL STOCK FARM,

ATCHEISON, KANSAS.
 Thoroughbred Short-Horn Durham Cattle, of Straight Good Book Pedigree, bred and for sale.
Also Berkshire pigs bred from imported and premium stock, for sale singly, or in pairs not akin. Address: GLICK & KNAPP, P. S. Persons, desiring to visit the farm, by calling on Mr. G. W. Glick in the city of Atchison; will be conveyed to and from the farm free of charge.

GEO. M. CHASE, KANSAS CITY, MISSOURI.



Thoroughbred English BERKSHIRE PIG.
 Dark Brahma and White Leghorn Chickens.
 None but first-class stock shipped.

\$15 SHOT GUN

A double-barrel gun, bar or front-action load; warranted genuine twist barrels, and a good shooter, for \$15. Can be sent O. D., with privilege to examine before paying bill. Send stamp for circular to P. POWELL & SON, Gun Dealers, 288 Main Street, Cincinnati-O.

SHEEP

Wanted in exchange for 240 Acres of Land in Missouri. Address: F. E. MILLER, Frankfort, Kansas.

JOHN D. KNOX & CO., BANKERS, Topeka, Kansas.

A General Banking Business Transacted, Money to loan on Real Estate, in any Amount from \$100 upwards.

SCHOOL BONDS.

Districts and Townships about to issue Bonds will save time and obtain the best rates by writing direct to us. Interest paid on Time Deposits. Real Estate Loans are completed without unnecessary delay and waiting. Address: JOHN D. KNOX & CO., Topeka, Kansas.

"The Best Thing in the West."

Atchison, Topeka & Santa Fe Railroad LANDS,

In Kansas.
3,000,000 ACRES
 Of the best Farming and Agricultural Lands in America, situated in and near the beautiful Cottonwood and Great Arkansas Valleys, the Garden of the West, on 11 Years' Credit, with 7 per cent. Interest, and 30 per cent. Discount for Cash. FARE REFUNDED to purchasers of land. Circulars, with map, giving full information, sent free. Address: A. S. JOHNSON, Acting Land Commissioner, Topeka, Kansas.

NATIONAL LOAN & TRUST CO., Topeka, Kansas.

Loans negotiated on improved property, County, Township and School Bonds; also County and Township Warrants bought and sold. Correspondence solicited from parties desiring to invest large or small amounts of money safely, to net 10 to 12 per cent per annum. B. HAYWOOD, President. G. F. PARNELLE, Vice President.

Land! Land! Land!

HOMES FOR THE PEOPLE.
350,000 ACRES
IN
Bourbon, Crawford and Cherokee Co's, KANSAS.
 STILL OWNED AND OFFERED FOR SALE BY THE **Missouri River, Fort Scott and Gulf Railroad Company**
 On credit, running through ten years, at seven per cent. annual interest.
20 Per cent. DISCOUNT FOR CASH IN FULL AT DATE OF PURCHASE.
 For further information address, **John A. Clark, LAND COMMISSIONER, Fort Scott, Kan.**

KANSAS FARMS AND FREE HOMES

Kansas display of products at Centennial surpassed other States. **KANSAS PACIFIC R. W. CO.** offers largest body of good lands in Kansas at lowest prices and best terms. Plenty of Gov't lands FREE for Homesteaders. For copy of "KANSAS PACIFIC HOME WEED" address: **LAND COMMISSIONER, K. P. R., Salina, Kansas.**

THE TEARLESS THRESHING MACHINES.
STANDS AHEAD OF ALL RAILWAY THRESHING MACHINES.
 Being the ONLY entire Machine awarded a **GRAND PRIZE MEDAL AND DIPLOMA OF HONOR**

On both Horse Power and Thresher and Cleaner, at the Centennial Exhibition. For catalogue of the above, and other Machines in implement, address: **MINARD HARPER, Cobleskill, Schoharie Co., N. Y.**



\$40 PER DAY! made easily with this Machine!
The most perfect in the world. Bars from 22 to 44 inches in diameter, does the work of a dozen men. The horse does not travel around the well. Auger is raised and lowered instantly. Successful where all others fail. No labor for man. Send for our 60 PAGE BOOK, FREE. **LOOMIS & NYMAN, Tiffin, Ohio.**

CAUTION!

To Farmers and all others who put barbs upon wire fences, making a barbed wire fence, and to all manufacturers and dealers in fence barbs and barbed wire fence.

YOU are hereby notified, that in putting barbs upon wire, making a barbed wire fence, or in using or dealing in barbs for wire or barbed fence wire, not made under license from us, you are infringing upon our patents, and we shall hold you strictly accountable for damages for all infringements of Letters Patent Nos. 66,189, 67,117, 74,879, 84,068, 123,965, 127,124, 127,508, 164,181, 165,661, 173,760, 173,491, 173,687, 180,351, 181,433, 186,889, 187,126, 187,173, 187,770; re-issue, Nos. 7,136, 6,976, 6,952, 7,038, 7,030, 6,916, 6,914, 7,566. Copies of our claims can be obtained of our attorneys, **COBURN & THACHER, Chicago, Ill.,** or of our counsel, **THOS. H. DODGE, Worcester, Mass.** **WASHBURN & MOEN MFG. CO., Worcester, Mass. I. L. ELLWOOD & CO., DeKalb, Ill.**

Smith & Hale, Hardware,

Wholesale and Retail Dealers in **HARDWARE,**
IRON, STEEL, NAILS, BLACKSMITH GOODS, WAGON WOOD WORK, STOVES, PUMPS, Fence Wire, Barbed Wire, And Fence Barbs.

AGENTS FOR FAIRBANKS SCALES.

BURKHARDT & OSWALD, Manufacturers of

HARNESS, SADDLES, COLLARS,

BRIDLES, HALTERS, WHIPS, etc. This establishment is one of the oldest in the State. Good work for reasonable prices. Prices sent by mail to persons living at a distance.

Kansas at the Centennial

A few fine Stereoscopic Views of the Kansas and Colorado Building, and the splendid exhibits made by these States at the Centennial, will be sent postage paid to any address for 35 cents each. Address: **C. A. SEXTON, Bookseller & Stationer, Topeka, Kas.**

8-Ton Scales for Sale.

We offer at a great bargain, a new 8-ton Standard Stock Scale of most improved patent. Will take as part pay a pony or young horse to the value of \$50 or \$60. Address: **DOWNS & MERRILL, Commission Merchants, Topeka.**

Standard Work!

Standard Stock!

Standard Prices!

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Of every description, and for every possible use, promptly and satisfactorily manufactured.

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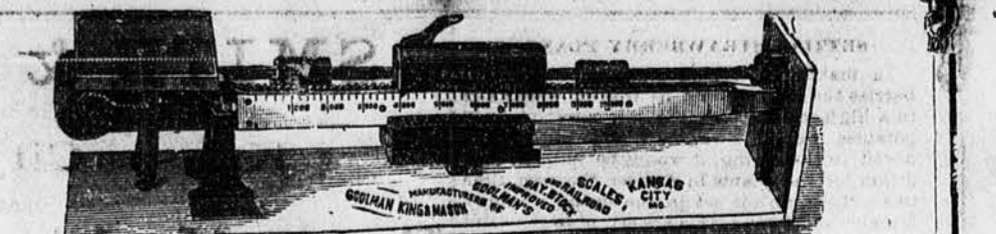
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TOWNSHIP BOOKS,

Poor Records, Estray Records, Justices' Records.

Legal Blanks,

Seals, Stamps, &c.
 No Hockstering—Uniform and Legitimate Prices.
GEO. W. MARTIN.



GOOLMAN'S Improved Standard Scales,

PATENTED MAY 23d, 1874.—MANUFACTURED BY
The Goolman Company,
Corner of Walnut and 20th Street, KANSAS CITY, MO.
ALL KINDS OF CASTINGS MADE TO ORDER AND SCALES REPAIRED.
 These Scales are superior in workmanship, accuracy, and durability, weighing from one pound to 500 lbs capacity of the scale, with the utmost precision, and will be sold on as good terms as any good scale. We also manufacture Goolman's Folding and Stationary Top SCHOOL DESKS, and Warrant the same to be the strongest and most convenient yet offered to the Western people.
Address for Circulars and lowest terms. The Coolman Co.

THE KANSAS WAGON!

Has received the HIGHEST AWARDS: Prize Medal and Diploma at the Centennial Exposition.
Judges' Official Report:
 For Excellence of Material, Thoroughness of Construction and Beauty and Perfection in Finish.
A. T. GOSHORN, J. B. HAWLEY, Director General.
 And also all Kinds of Freight, Spring and Express Wagons.
 We use the most improved machinery, and under the direction of the most skillful foreman in the United States, employ two hundred men in the manufacture of these wagons. We use the celebrated Wisconsin Hubs and Indiana Spokes and Felloes, and carry large stocks of thoroughly dry first-class wagon timber. Our work is finished in the most substantial manner, with all the latest improvements. Every wagon warranted.
Kansas Manufacturing Comp'y, Leavenworth, Ks.
 A. CALDWELL, President; N. J. WATERMAN, Vice President; C. B. BRACE, Treasurer; J. B. MCAFEE, Secretary; A. WOODWORTH, Superintendent Shops.
The above Line of Goods are for sale by
W. W. CAMPBELL & BRO., TOPEKA, Ks.

E. E. EWING,

227 Kansas Avenue, Topeka, Kan.
 Every variety of choice and fancy goods have been added to our large stock of Standard Groceries. And we now offer our customers the finest assortment of Groceries to be found in the city.
Molasses, Syrups, Honey, Sugars, Coffees, Teas.
BEST M. SYRUP, BEST WHITE ROSE SYRUP, BEST N. O. MOLASSES
 Mocha and O. G. Java Coffees; Green Teas, Japan Teas, English Breakfast Tea, all selected with care from the best houses, and warranted genuine.
CANNED GOODS, GREEN AND DRIED FRUITS, SALTED MEATS, AND FISH, EDAM CHEESE, PINE APPLE CHEESE, ELGIN CHEESE.
FLOUR and MEAL:
 At the head of the list of Flour in Kansas stands OUR CRYSTAL! Oat-Meal, Prepared Wheat, Breakfast Grits.
CHINA and GLASSWARE.
 We have fitted up the second story of our store as a CHINA and GLASS HALL, and furnished it with a large stock, selected with special reference to the wants of this city and country. Our stock comprises a full line of **White Granite Best, White Granite Victoria, English C. O. Ware, Glass, Yellow and Rockingham Ware.** We also keep a large stock of **STONE, CROCKERY, WOOD and WILLOW WARE, etc.**
HIGHEST PRICE PAID FOR COUNTRY PRODUCE.
 Our business is conducted on a cash basis, the only system by which a low range of prices can be maintained. We sell the best and warrant our Goods. Call and examine our stock.

Bartel Brothers, FURNITURE

152 KANSAS AVENUE, Furnitre Manufacturers and Dealers, TOPEKA, : : KANSAS.

PATRONS' PAINT COMPANY.

INCERSOLL'S READY MIXED PAINT AND PARIS GREEN!
50 per cent. saved.
 Freight paid on Paints to all parts of the country. Our book, How every man can paint, mailed free upon application to the **Patrons' Paint Company, 259 Front St., New York.**

CARBONATED STONE And Pipe Works.

LOCATED NEAR J. P. COLE'S STORE, ON KANSAS AVENUE, TOPEKA.
 We are now prepared to furnish a full assortment of **Chimneys, Sewer and Drain Pipe, Well Tubing, Flaggng and Building Stone and Trimmings.**
TAKE NOTICE.
We Guarantee the Durability of All Goods

PERPETUAL Trees! Trees!

Sorghum Evaporator.
\$15, \$20, \$25.
 Cheap and Durable.
 Send for Circulars. Address the only Manufacturers,
CHAPMAN & CO., Madison, Ind.
 And small fruits of old and new sorts, in immense quantities, of the best quality and lowest living prices at the **Dayton Star Nurseries, Wholesale Price List now ready. Hoover & Gaines, DAYTON, OHIO.**

Have You Lost Horses?

The undersigned makes a speciality of hunting stray horses. Stray animals are never moved from where found until identified by the owner. Full descriptions sent me by mail will be promptly attended to and the charges when the animals are found will be reasonable. Address: **J. H. CLIFFORD, Holton, Jackson Co., Kansas.** Refer to S. K. Linbeck & Co., Bankers, Holton, and A. H. Williams, Sheriff Jackson Co., Holton.

Have You Lost Horses?

I have knowledge of the whereabouts of the following stray animals:
 A black mare, four years old last spring.
 A bay mare, three years old last spring.
 A bay mare, three years old last spring.
 All large stock, send full description.
J. H. CLIFFORD, Stock-Hunter, Holton, Jackson Co., Kansas.

STRAYED OR STOLEN.

On the 20th day of July at the Allen Farm, one mile east of Topeka, a three-year-old bay filly, with blaze in the face, and one hind leg white. To any person finding this animal or giving such information as will lead to her recovery, I will pay five dollars.
THOMAS SULLIVAN, Topeka, Kansas.

CORN WANTED.

Two or three hundred acres in field, in Shawnee, Douglas, Jefferson or Jackson counties, with good feet; lots adjoining. Address: **J. F. True, Newman, Kansas.**

FOR SALE

Spanish Merino Rams

The undersigned has for sale thirty American or Spanish Merino Rams got by him at Superior golden fleeced Ring Ram, a pure Hammond. Clipped last spring without having been sheltered during the year, thirty-two pounds (32) lb. four days less than one year's growth, from pure Sweestakes and Goldenst ewes. Few Southdowns, one one Cotswold, also Poland China Pigs. Address: **C. PUGSBLEY, Independence, Mo.**

WANTED energetic men to travel and appoint agents

in every county to sell our **Indispensable Household Articles** to families. **Salary Liberal.** Add: **BROWN & CO., 216 Elm Street, Cincinnati.**

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A SURE CURE FOR PILES.

No one need suffer. A positive remedy for all kinds of Piles, always bring relief at once, giving instant relief. An Indian treatment you applied called **Dr. Williams' Indian Ointment.** (Prepared only for Piles and nothing else.) Thousands already cured, many of whom had spent hundreds of dollars doctoring with physicians, some to the Hot Springs, Arkansas, and tried dozens of medicines advertised without benefit. Testimonials and full information, see large circular around each box. Beware of imitations. Show this card to your druggist, ask for **Dr. Williams' Indian Ointment** and take no substitute. **G. W. F. FULLER, Proprietor, 338 Superior St. Cleveland, Ohio. FULLER & FULLER** wholesale agents Chicago, Ill.

STALLION SEASON.

Prairie Dell Farm,

Breeds and has for sale the most fashionable trotting stock—Hambletonians and their most successful crosses.
 For sale, sons and grandsons of Ryedyk's Hambletonian, as finely bred as can be procured anywhere, and of much intrinsic merit.
 Apply to **R. I. LEE, Agent, TOPEKA, KANSAS.**

SETTING STRAWBERRY PLANTS.

In making new field plantations of strawberries the land should be free of weeds and in a high state of fertility. If peas or early potatoes were grown in it, and highly manured in the spring, it would be in good condition for the plants in August, the best time to set them, unless set in the spring. Immediately before the plants are set, give the land a dressing of well-rotted dung, even if it were manured for a previous crop, and plow it in; or first plow the land deep as necessary, then spread on the manure and cover it lightly with a one-horse plow. A great deal of manure is wasted by being covered too deep, two inches deep being the depth that many experiments by the best agriculturists of this and other countries have decided to be the best for crops generally. If we harrow in the manure much of it is left upon the surface of the ground, and its virtues evaporate. So it is in some degree when it is covered very lightly with earth, if the weather be dry after harrowing it in; and it is a question for farmers to decide, whether it is not better to take a little more time in some cases, and use a one-horse plow to cover manure. Good crops, of course, are grown by covering manure at the first plowing; but for an acre or two of strawberries or other small fruits I think it would pay to use a one-horse plow in covering the manure, so as not to cover it too deep.

The rows in the field culture of strawberries may be three to three and a half feet apart and the plants set from 12 to 15 inches apart in the rows. This width is to allow a cultivator to be run between the rows, after they have become widened with plants from runners, so that the open space between them is not over two and a half feet. Many strawberry growers renew their plantations as follows: As soon as the berries are all picked the space between the rows is plowed with one horse, turning the furrows so as to leave the ground level. Then it is smoothed with a cultivator; and an iron hand-rake would, if used, be a good finishing operation. The plantation is thus left till fall, when the space between the rows is covered with runners; then the old plants are plowed up, and all the runners but a strip six or eight inches wide in the middle of them, which strips are the rows for the next season; and in this way a plantation may be renewed for many years; but it would be necessary to apply manure once a year to the spaces between the rows when they are plowed. It is a rather remarkable fact that strawberry growers, who sell their fruit in the large cities can make more money in "poor seasons" than in "good" ones, because in a favorable season, with frequent rains, the crop is so large that the price is not remunerative. In New York this season hundreds of thousands of baskets of strawberries were sold at a dead loss to the growers, the receipts merely covering freight and commission. T. B. MINER.

Happy tidings for nervous sufferers, and those who have been dozed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC CO., Cincinnati, O.

ADVERTISEMENTS.

Our readers, in replying to advertisements, in the Farmer will do us a favor if they will state in their letters to advertisers that they saw this advertisement in the Kansas Farmer.

ST. LOUIS Exposition and Fair.

Seventeenth Annual Meeting. THE INDUSTRIAL EXPOSITION Opens MONDAY, the 10th day of September, 1877. THE LIVE-STOCK, FLORAL, FRUIT, &c., DEPT'S Commence MONDAY, the 1st day of October, 1877. The Exposition and Fair Closes SATURDAY, the 6th day of October, 1877. Grounds contain 88 acres. Conveniently Accessible. REDUCED RAILROAD AND STEAMBOAT FARES. PREMIUMS, - - \$50,000. NO ENTRY FEE CHARGED.

Exciting contests of speed in the Amphitheatre. Fine Art Exhibition of the highest order of merit. The ZOOLOGICAL GARDEN, with its beautiful buildings, handsome specimens and complete appointments.

Grand display of Agricultural Implements, Machinery in motion, Mechanical Productions, Produce, Textile Fabrics, Cotton, Minerals, Flowers, Works of Art, Horses, Cattle, and other Domestic Animals. All communications addressed to the Secretary will receive prompt attention. JULIUS S. WALSH, Pres't. G. O. KALB, Sec'y. St. Louis, Mo.

All diseases of the Eye and Ear are treated with the most successful and easily straightened, and all other operations on the Eye and Ear skillfully executed. Also Chronic and Surgical diseases, deformities, &c., a specialty, at the TOPEKA MEDICAL & SURGICAL INSTITUTE, AND EYE AND EAR INFIRMARY. For further information or consultation, call on or address DR. E. IRBORN & MULVANE, Physicians and Surgeons in Charge, Topeka, Kansas.

Durham Park Herd. Best Berkshires IN THE WEST.

ALBERT CRANE, DURHAM PARK, MARION CO., KAN. Young pigs, the get of such well-known and prize-winning boars as imp. Sir Dorchester Cardit, imp. Royal Tombe, imp. Baron Cardiff 2d and imp. Baron Berkeley, now for sale. PRICE LIST: Single pigs, 2 to 6 months old, \$30 00 to 40 00 Pairs, not related, 2 to 6 months, 40 00 to 80 00 Sow pigs, bred, 8 to 10 months, 40 00 to 80 00 No pigs shipped that will not be a good advertisement. Liberal deductions on more than two. Boxed and delivered at railroad station free of extra expense. All the best families are represented in this herd, such as Salles, Cantilena, Topsy, Humfrey, Exquisite, Manchester, Pride of St. Bridge, etc., etc., all got by imported boars bred by the best English breeders. All orders filled in rotation, and a strictly cash business done. The herd numbers about 40 breeding sows; some being imported and prize-winners—and a large number of choice pigs are now ready to ship. Address ALBERT CRANE, Durham Park, Marion Co., Kansas.

SMITH & KEATING,

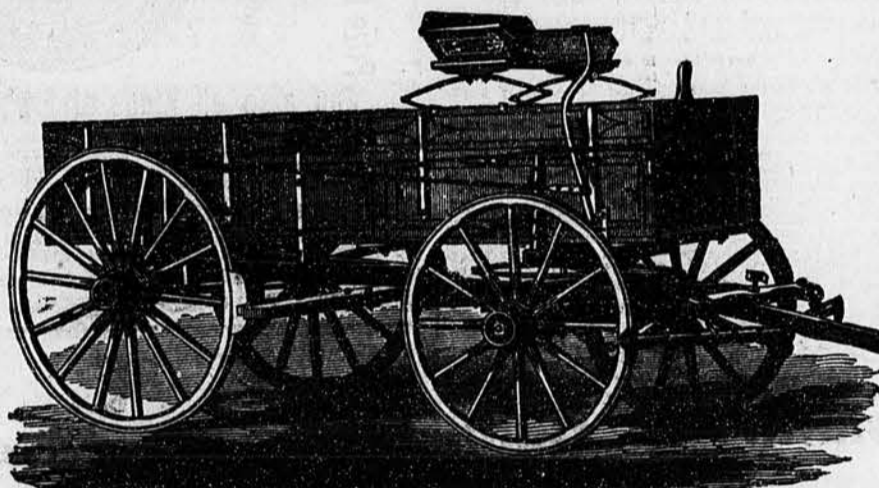
Kansas City, Missouri, DEALERS IN

Farm Machinery & Wagons.

BEING the Pioneers in the trade in this city, we have been able to take our choice of the best implements made, which our long experience in the business enabled us to do with great satisfaction to our customers as well as to ourselves. Having the Largest Houses in Kansas City we have facilities for keeping a full supply of goods on hand suitable to the wants of the trade. Manufacturers of goods whose reputation is world-wide, have made our house their Western Depot, or distributing point; thus taking advantage of freights. We are enabled to furnish the Best Implements at a very reasonable price. We call your attention to the Celebrated Goods handled by us, all of which are warranted. We publish a "Farmers' Diary and Memorandum Book," which will be sent free to any farmer writing to us for one.

BUCKEYE PLOW SULKY. CAN BE ATTACHED TO ANY PLOW.

We have given the Plow Sulky question our special attention, and can confidently assert that the BUCKEYE SULKY has more points of excellence than any other in the market. It is simple in construction. It is strong, durable and easily operated. Can be attached to any common plow, either wood or iron beam. Can be reversed to use on either right or left hand plow. It is adapted to either two or three horse plows, right or left hand. The depth can be regulated or the plow raised entirely out of the ground without stopping the team. It will always hold the plow at a uniform depth, when passing over either ridges or furrows. With it you can turn a square corner without raising the plow. Can be used with a rigid lever for general use, and may be left loose and adjustable for very rough and stony land. This Sulky has been thoroughly tested and came off victorious at every Fair and field trial where exhibited the past two years. This is just what every farmer needs, and has been looking for. SEND FOR CIRCULAR.



BAIN AND SCHUTTLE WAGONS.

For Strength, Durability, Lightness of Draught, and Beauty of Finish are noted all over the United States. They are acknowledged by other wagon manufacturers to be the two standard wagons of the country and as they are the best proportioned wagons made, are used as patterns by other manufacturers. We have never heard any manufacturer or dealer claim to have as good a wagon as either the BAIN or SCHUTTLE. One of these wagons usually last as long as two of the ordinary make of wagons. We do not claim to sell the lowest priced wagon, but to claim to have the best, which, under all circumstances will prove to be the cheapest in the end. Send for Circular. Western Depot for Factory SMITH & KEATING Kansas City, Mo.

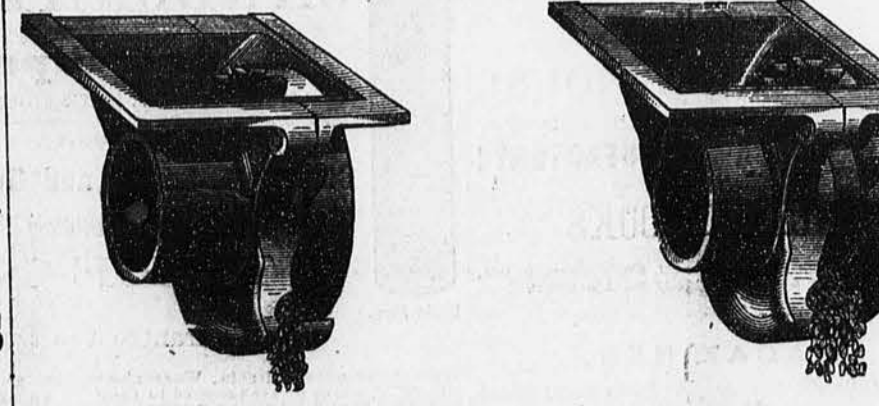
WE ALSO KEEP CONSTANTLY IN STOCK THREE-SPRING WAGONS AND



PLATFORM SPRING WAGONS,

Of different sizes and styles, with Plain or Paneled Beds, with one, two or three Seats, with Pole or Shafts, or both, as desired, with or without Brake, etc., made by E. BAIN, Kenosha, Wisconsin. We have handled BAIN'S THREE-SPRING and PLATFORM SPRING WAGONS nearly two years, and they are fast becoming as popular as his Celebrated Farm Wagons. These wagons are without an equal in style and finish, and are manufactured for us, expressly to suit our trade. There is no factory in the United States where greater care is given to the selection of material used. A thorough system of inspection is strictly adhered to, so we are prepared to WARRANT each part to be perfect. If defective, it will be replaced without charge. A better quality of springs is used in their construction than is used in ordinary vehicles in the market. Send for Illustrated Pamphlets giving full particulars. Any information in regard to Prices, or Freight on Wagons to your place, will be promptly and cheerfully given. Western Depot for Factory SMITH & KEATING, Kansas City, Mo.

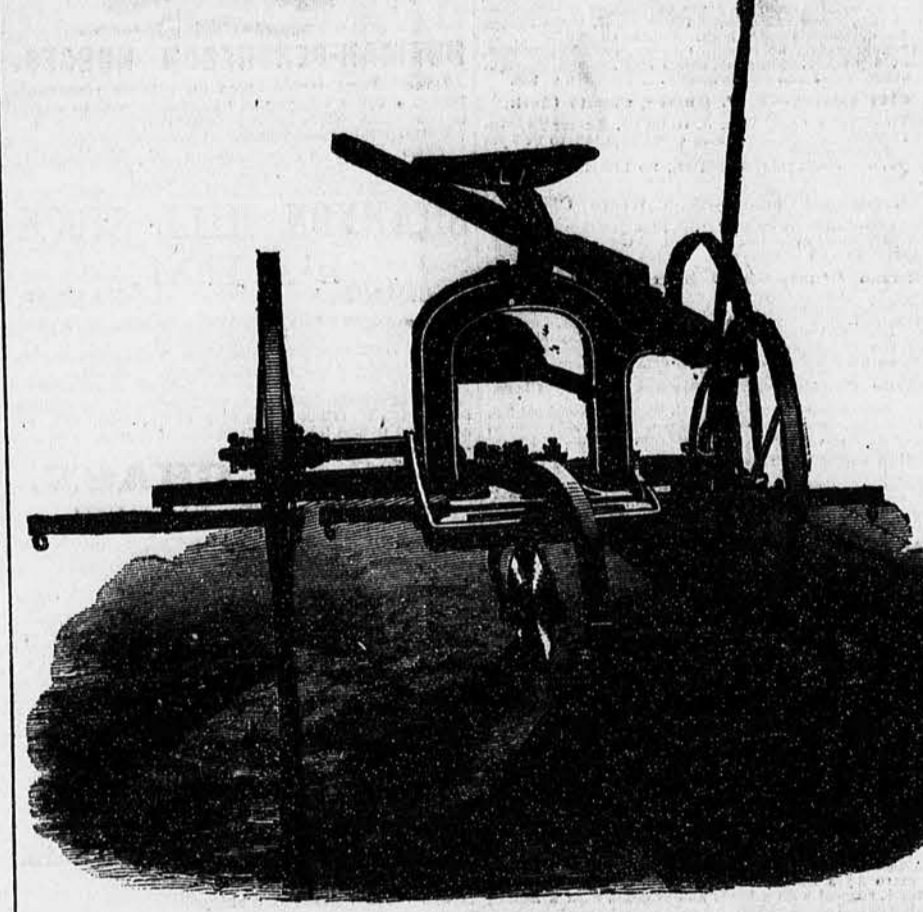
FORCE-FEED FOR BUCKEYE GRAIN DRILL. THE FOLLOWING CUTS REPRESENT OUR NEW FEED



VIEW OF FEEDER SET FOR SMALL QUANTITY. Received the highest award at the Centennial Exhibition. It meets them all. Just what you want. Will sow any desired quantity without change of gear. Send for circular. Note carefully, that the BUCKEYE DRILL has been improved for the season of 1877. That it is NOW, and ALWAYS HAS BEEN the LEADING "FORCE FEED" GRAIN DRILL. It has a new device for measuring amount of grass seed sown per acre. It has a new device for measuring the LAND sown. It is the best made, and most finished Drill in market. It sows more evenly, and at a more uniform depth than any other drill. This is the only drill that will sow JUST AS WELL, on rough, uneven ground, or on a hillside AS IT WILL ON LEVEL LAND. It has a new device for measuring the amount sown per acre; everything about it is simple, durable and effective. There has been an increasing demand for a POSITIVE FORCE FEED, which can be regulated for any desired quantity without any change of gear, and without carrying around a lot of extra gears. This very desirable feature is accomplished with our new force feed and in a very simple and effective manner. Our improved HOE SHIFTER for changing the hoes from straight to zigzag, and the reverse in an instant, without stopping the team; is without doubt, the most perfect arrangement for the purpose that has ever been invented. A small boy can operate it with ease. We have sold this Drill for eleven years, and never had a complaint. Send for descriptive circular. We cheerfully warrant this Drill the best in use. Don't buy a Drill until you see the NEW FEED BUCKEYE. SMITH & KEATING, KANSAS CITY, MO. Dealers in Bain and Schuttler Farm and Spring Wagons, Massillon, and Vibrator Thrashers, Eureka Corn Shelters, Sulky Hay Rakes, Buckeye Plow Sulky, and other First Class Farm Machinery. Send For Circulars.

DEERE, MANSUR & CO.,

GENERAL DEALERS IN ALL KINDS OF FARM MACHINERY, KANSAS CITY, MO.



THE GILPIN SULKY PLOW,

DEERE & CO., Moline, Ill. Over 10,000 farmers award it the palm over all competitors.

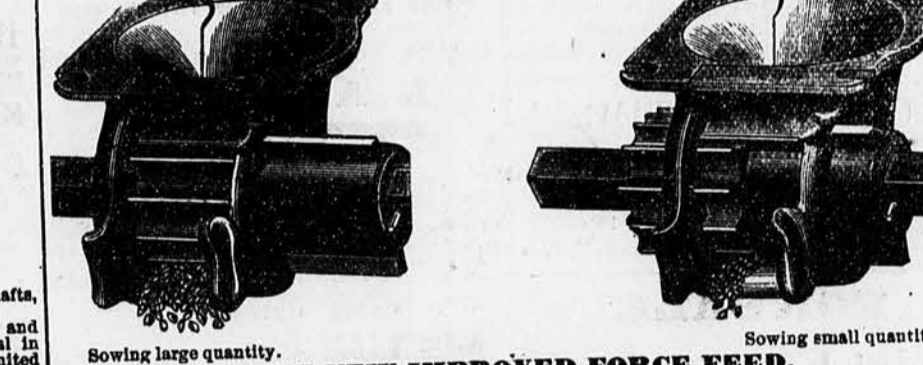
THE ADVANTAGES OF THE GILPIN BRIEFLY SUMMED UP. Its freedom from complications of levers and changes. Its patent chilled boxed wheels, preserving the only part liable from wear. It is the only Sulky Plow that stands the strain of "red root" prairie breaking. The wheels carry the weight of the frame and operator, and part of the weight of plow; and its chilled iron boxes are anti-friction, combining to give the easiest possible draft. It is, in short, the simplest, best proportioned, strongest, lightest draft and longest lived sulky ever made. Eight thousand intelligent farmers have, during its first two years, awarded it the first premium over all competitors, both old and new.

IMITATIONS are numerous, affording the best evidence of its worth in the estimation of other farmers; but our patents protect us in the vital principles which have given the "GILPIN" its unbounded success.

The Mitchell Farm Wagon, The Cortland Spring Wagon, The Badger Buggy. First Quality Work at Very Low Prices.

The Hoosier Grain Drill,

WITH ITS IMPROVED FEED, has practical advantages over all other drills in use, which, with its long established and unequalled reputation cause it to be PREFERRED TO ALL OTHERS.



The accompanying Cuts represent our New Force Feed. THE NEW IMPROVED FORCE FEED. The complication of gear wheels used heretofore for changing the quantity sown, of different kinds of grain, has been a source of great annoyance to the manufacturer, as well as to the farmer. The feed is the most important feature about a grain drill, and we can say without fear of successful contradiction, that we have the best, the most accurate and simple Feed in the world. It is a regular Force Feed, and will sow any quantity desired, from one quart to four bushels per acre. The great advantage this Feed has over all others is, the quantity sown is increased by increasing the carrying capacity. There is a flange on the hub at the bottom and top of the cup, which cuts off the flow of seed; so there will be sown just what the fluted feed roll will force out, thereby making it a POSITIVE FORCE FEED. The feed has been thoroughly tested, and we have not the first instance of fault-finding, either among dealers or farmers; but all with one accord say it is the simplest, most durable, most positive, and easiest changed Feed in America. Another important feature is, the change of quantity can be made just as well when the hopper is full of grain, as when it is empty; and neither is there any change in size of feed cup, which has a large, wide mouth and throat, making it impossible to bridge over when sowing trashy grain. We can furnish, when desired, THE NEW CIRCLE SHIPPING BAR, for changing hoes instantly to the double rank, or vice versa. In addition to its many special advantages, and its perfect construction, the HOOSIER is, unquestionably THE HANDSOMEST DRILL IN THE MARKET. SOLD THROUGHOUT KANSAS. Send to us for special Catalogue.



THE WELL-KNOWN AND UNEQUALED CHAMPION FANNING MILL, For Grain, Flax or Castor Beans, At Greatly Reduced Prices. Send for Descriptive Circular.

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