

# KANSAS FARMER

ESTABLISHED, 1863.

TOPEKA, KANSAS. JULY 7, 1875.

VOL. XIII, No. 27.

## The Kansas Farmer.

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

### Agriculture.

#### CORN NO KING.

It is often asserted that in Kansas corn is king. During the period when immigrants came into the state annually by tens of thousands, corn may have been acknowledged sovereign, but in 1872, it was ignominiously and permanently deposed. Corn, at \$100 per bushel and fifty bushels to the acre, may receive homage, but at fifteen cents a bushel it is despised by Grangers and anti Grangers.

Corn cannot be king because it will not bear transportation. Cotton was king because the cost of its transportation to distant markets was small compared with its full value, its value being great in proportion to its bulk.

Kansas on account of her remoteness from the great centers of population, cannot amass wealth by exporting grain. Whatever products she exports should be concentrated; those that will bear transportation to the remote regions west of us, or on the seaboard east. All the agricultural productions, the greatest value in least bulk.

Every animal may be considered as a machine, and all the products as manufactured articles, and he who, by the use of these animal machines, transfers the coarse grain of our fields and the rich grass of our native pastures, which in spite of the drouth, grasshoppers, and cold of last year, was never more luxuriant than now, into these valuable products, is a manufacturer. By labor and skill he has rendered the products of nature, which were comparatively worthless, into products of value. Manufacturers bring wealth.

Then let every animal in the State of Kansas be well cared for, and their numbers be increased until all the coarse grains that will be raised in the State shall be consumed within her borders. When our hillsides and high prairies shall be covered with cattle and sheep which under an intelligent system of husbandry shall be made to transform all the grain grown in valleys and the spontaneous growth of our native pastures into fine butter, beef, and wool, then will the Kansas farmer have money, because the surplus products of his farm will bear transportation.

In no distant future, Kansas will stand second to no state in the Union in the representation of animal products. Corn will be an efficient subject, but it never can be king in Kansas.—Prof. Ward in *Industrialist*.

#### BUCKWHEAT.

The principal value of Buckwheat to farmers in this latitude, consists in it as a supplemental crop, or as one that can be substituted where one has failed by reason of insects or otherwise. On account of the destruction of all kinds of crops by the Rocky Mountain locust in so large an area in eastern Kansas and Nebraska, and in western Missouri and Iowa, more than the usual quantity of buckwheat will be sown. The condition of the soil, and more than the usual fall of rain at this season of the year, are both highly favorable to the growing of this crop. As this crop requires from sixty to seventy days to mature, it should be sown usually from the 5th to the 25th of July, although many good farmers prefer sowing it from the 20th of July to the 1st or 5th of August. On low grounds, subject to early frosts, it should be sown as soon as the first date given, while on high airy locations it may be deferred to a latter period. The soil should be thoroughly pulverized on the surface, so that the plants will get a good start at once. If the soil is moist when the seed is first sown, it will sprout very quickly. Sow with a wheat drill set to sow half a bushel, as the plant is not spreading and branching in its habit, it will be seed enough. After sowing, if it be very dry, roll the land; if wet, do not.

The usual time for harvesting this crop is when the principal portion of the seed has assumed a dark color. It shells so easily that it must be handled with great care. It can be cut with a reaper. One having a dropping attachment is to be preferred. Drive very slowly and drop the grain in small gavel. Two men are usually required to set the grain up in small stooks or bunches, which at the base, are about as large as a two-bushel basket. When set up, twist the tops slightly of each bunch, and tuck them in and let the bunches remain in the field until cured. This grain must not be bound like wheat and must never be stacked. It usually becomes sufficiently cured in two weeks to thresh. Then, if the weather is favorable—that is, clear and dry—spread some blankets upon the hay or grain rack, and haul it to the machine. To thresh with a machine, leave only one row of teeth in the concave beneath the cylinder. If a small quantity is raised, the grain may be beaten out with a fall as fast as it is brought, or may be trodden out with horses.

The farmer who fails to keep a correct account with each lot and crop, is very apt to cheat himself.

## STATE NORMAL SCHOOL,



EMPORIA, LYON CO., KANSAS.

SUPERIOR ADVANTAGES are afforded at this institution for all who desire to become TEACHERS in any GRADE of school. The TRAINING SCHOOL is a part of the Normal, arranged expressly to meet the practical wants of the TEACHER. In each department of the Normal, experienced educators are employed.

A Preparatory and High School Department fits students for the Normal, or for business and college. Pupils are received from any part of the state and classified according to age and advancement. The Fall Term commences Sept. 8th. For full particulars send for circular. C. R. POMEROY, President.

#### CUTTING GRASSES EARLY.

I have been watching a grass field since last July, part of which was cut early with a mower, and the rest left three weeks later. The square block of two or three acres in the center of the field, which was cut last, seemed almost killed all the fall. The grass was timothy, and very little aftermath appeared, while the outside of the field cut was bright and green. The same result appeared again this spring, and I judge the middle of the field will not yield a half ton of hay per acre, while the outside may go up to a ton and a half. The meadow is past its best, and if the owner is wise, he will plow it up and plant it this spring preparatory to reseeding. Even here the lack of growth last fall must make this part of the sod less valuable, even for plowing under. Add to this that the early cut grass was best for hay, and it makes a strong case for early cutting. It is equally important for clover, and indeed, unless it is kept very closely cut or pastured the second season, so as to prevent its seeding, it is rarely worth keeping for grass the third year.—*Ex.*

#### SYSTEM IN FARM LABOR.

The following pair of pertinent paragraphs which we find in the N. E. Homestead must have been written by some level-headed body who keeps his eyes wide open and knows how to tell what he sees and thinks:

The amount of muscle that can be saved by a little brain labor is wonderful. And yet the science of doing everything in proper season and place, in fact, properly, is something that agricultural papers, or farming books, cannot teach. Experience, calculation and forethought, are the mentors. A month before a piece of machinery is to be used, a glance at it will show where it is defective. A rainy day, a spare hour, a chance to take it to town to be repaired without going on purpose. These present themselves to the intelligent farmer, and when the harvest is ripe, or the corn ready for the cultivator, there will be no delay for the mending of damaged machinery. There is no such weak laziness, or wicked waste of time and opportunity, as the man practises who never has time to do anything properly. He goes to town with three errands, and comes home with only one finished, he has no time for the others. He plows for fifty acres of corn, but has no time to get in but forty. He plows with a dull plow, and chops with a duller axe, for lack of time to sharpen them. All these are lack of forethought and system. A neglect to use the brain that God has given him to shape and direct and save the muscle. An ox will do the work but he cannot plan it. The horse is powerful, but he is controlled by his master, and his power utilized. Man's labor is but brute strength, and the stronger the brain force that is brought to bear upon it the more surely every stroke tells, and the more grand will be the results.

The secretary of the National Grange assures us that the Order, though passing through some trials in the way of criticism from without, never was really more promising. On an average, eleven Granges per day are being organized throughout the country.—*Minnesota Union*.

#### THE UNCONSIDERED TRIFLES.

Two farmers started business side by side, a short distance from the City of Philadelphia, many years ago. Both were industrious, temperate, and attentive to business; but yet it was evident one of the two was rapidly outstripping the other in accumulating wealth. To their neighbors this seemed a problem that could not be solved, but late in life the more successful of the two, explained the matter in a very simple way by stating that while he let nothing go to waste about his farm, his friend overlooked the many small items that ought to pay the family's bills at the store. Meanness and economy are by no means synonymous terms; and our thrifty friend had been collecting his nuts of various kinds, persimmons, the few vegetables that his own family did not need, and in fact all the odds and ends that are so well known to the farmer's boys everywhere. These were regularly added to his stock of butter and eggs at a very little cost and sold upon the market stall, while the prowling population of the neighborhood appropriated these little outside luxuries from the less provident farmer's domain. Both were successful in life, but the one who paid attention to the little items, was eminently so, and could gratify as he went along very many desires for luxuries of life, that the other felt to be beyond his means. Take care of the cents and the dollars will take care of themselves, is true in farming.—[*Poor Richard*].

HOW TO STACK GRAIN.—J. H. of Ames, Iowa, gives us the following as the result of his experience in stacking grain. He says: I wish to say a few words to the farmer through the *Inter-Ocean* in regard to saving small grain. Much has been said about preparing the land for a crop and how to raise it, but I have never seen one word in print as to how to save it after it was raised. As a general thing, farmers are careless how their grains are stacked, and I believe my experience would justify me in saying that enough grain is spoiled in the stack yearly to pay the threshing bill, which would amount to a large sum of money. I own one-half of a threshing machine, and have been threshing for five seasons, and many of the stacks would have been turned over, or the other end up. We often find stacks huddled together so close that a machine cannot get in until forty or fifty dozen of bundles are taken out, and the farmer will grumble because it takes so long to set the machine. Ten feet is enough for a bottom for a stack and wide enough for a rick, and they should be far enough apart to leave seven feet between them at the bulge. The inside courses should be laid down closely and solid, in order that the center will not settle, and the outside course laid loosely, that it may settle more than the center. All stacks should have a good bulge. In stacking flax, never tramp the outside, but stand or walk around in the center, leaving the outside to settle. That is the way I find grain keep best.

A little camphene dropped between the neck and stopper of a glass bottle will render the latter easy of removal when it becomes jammed fast.

### Horticulture.

#### KANSAS STATE HORTICULTURAL SOCIETY.

Proceedings of the Fifth Semi-Annual Meeting, held at Ft. Scott, June 24 and 25, 1875.

#### THE PROSPECTIVE IMPORTANCE OF KANSAS AS A FRUIT GROWING STATE.

BY DR. WM. H. WARNER, OF GIRARD.

[Concluded.]  
This Diploma is awarded to Messrs. Wm. M. Housley, J. Stayman and F. Wellhouse, delegates of the State Horticultural Society, State of Kansas, for the largest display of fruits, unexcelled in size, beauty and excellence, exhibited during the session of the American Pomological Society, held at Richmond, Virginia, on the 6th, 7th and 8th days of September, 1871.

JOHN M. ALLAN, President.

H. K. ELLYSON, Secretary.  
With this invaluable certificate they received twenty dollars in money and a box of fine chewing tobacco.

We have not time to say much more of the past, and will only give a copy of the following medal and Diplomas in the possession of the Society, which speak for themselves:

1st. A silver medal awarded this Society by the New Jersey State Agricultural Society at its Fair, held at Waverly, October, 1873, bearing the following inscription: "Awarded the Kansas Horticultural Society for a display of fruits."

Also another with this inscription: "Awarded by the New Jersey Agricultural Society to the Kansas State Horticultural Society for an assortment of fruits."

Also one other Diploma from the American Institute, with this inscription: "Awarded by the American Institute to the Kansas State Horticultural Society, for one hundred and ninety varieties of apples. Accompanied by this certificate: "They are the largest and handsomest apples exhibited at the Forty-Second Annual Fair, and we have never seen a finer collection."

F. A. P. BARNARD, President.  
IRA E. GAVITT, Recording Secretary.  
SAMUEL D. TILLMAN, Cor. Secretary.

We might go on *ad infinitum* in quotations from the sayings of the most celebrated fruit men of the United States in praise of Kansas fruits. But time will not permit. It is enough for us to know that the universal testimony was that Kansas was not only a fruit growing country, but the banner fruit growing State of the great central basin.

It may be expected of me to say something of South Eastern Kansas as a fruit region. Having lived in this section of Kansas since the dove of peace spread her wings over our common country, I cannot disguise my partiality for the neighborhood of my new home in the west.

We have fruit growers in business, and reputation, I believe second to none in the State, whose experience I shall expect to hear during the session of this society, and who will support me in the declaration, that no part of the west, or of the United States, or of the world, is better adapted to the cultivation of fruits, than this rich soil and genial climate. And, although few apple orchards are old enough to bear, we know that the older orchards of Missouri, just over the line, growing in the same kind of soil and latitude, are annually weighed down with their luscious fruits, and brought to our door at reasonable, but remunerative prices.

This is, in fact, the native climate of the peach. Only a few miles east of this city (Ft. Scott), I examined a peach orchard set out then, thirty years before, full of blossoms. During that time it had died down three times, and each time a new orchard sprang up from the roots of the old trees, and I presume, the same orchard is in existence to-day.

Is there another country where the peach tree will to such an age, renew its top growth of body and branches about every ten years from an everliving root?

Although disappointments have been met by some, and a few have been discouraged, the past records of Kansas fruits has astonished the nation, and removed from the minds of our eastern brethren that deep-seated prejudice for what there seemed to be some grounds. It would take volumes to contain what eminent fruitists and the press of the country have said in laudation of Kansas fruits. And as before said, we are willing to judge the future by the past, but certainly if there was naught else to encourage us, we might confidently predict a glorious future for our young but vigorous state, and her paramount and eminent prospective importance as a fruit growing state. But the future labors of the pomologist need not be obstructed by the blunders and mistakes of the past, for in his profession, more than any other, the lamps of experience will light up his pathway, and investigation, experiment tests, and trials guide and direct his footsteps.

Long theoretical articles have been written to prove to us that trees will not grow and live in Kansas; and how very strange, too, that so many men have had the patience to read these articles, and some the credulity to be influenced by them. There is just as much sense in saying that there are no rocks in our hills, or in the steep cliffs of our river banks, as to declare that our rich river bottoms and hillsides will not raise fruit, ornamental and forest trees. Tell me, whilst resting under the grateful shades of our mammoth oaks, hickory, and walnuts of Kansas forests, what trees will not grow in Kansas, and then tell me that the sun never shines above us, but that eternal darkness covers the land beyond the great farther of rivers.

The annual growth of several species of our native forest trees has been measured by Prof. E. Gale of our Agricultural College, and found greater during a period of one hundred and fifty years, than the same kind of trees upon the banks of the Hudson river. The testimony of nature cannot be doubted. The wood rings tell a true tale, and cannot lie, and by them is indicated the variable growth of different years, showing the fruitful and unfruitful seasons of Kansas for years prior to the settlements of the white man. Forest trees are found upon every variety of soil, the barren hills and alluvial river bottoms, upon the highlands and lowlands, in fact, wherever they are wholly, or even partially protected from fires.

"The tree limit" is the fire limit. "The tree line" is where is set up some natural or artificial obstruction to the hissing, crackling waves of fire which have annually swept over the plains of Kansas destroying every living thing before its sweeping flight. (See Prof. Gale's report on wood growth in Kansas, made at the Eighth Annual Meeting, and found on page 102, published transactions for 1874.)

That trees will grow in Kansas, and that fruit trees produce abundantly of fruit and of a superior quality are facts self-evident and proven by the experiences of the past. But there are other considerations which add to the future importance of Kansas as a fruit state as well as agriculturally.

Kansas is the hub of the Union, lying nearly or quite in the center of the great nation—a sisterhood of states. She is connected with all the members of this family by the great modern highways, railroads. The question then arises shall we cultivate the fruits?—not only as a luxury but for profit. Is there a future prospect of making the almighty dollar come to our pockets in exchange for apples, peaches and pears and our blue and amber clusters of grapes, or their product—pure wine, such as gladdened

the heart at the wedding of Cana. We answer emphatically, yes!

Our grapes are earlier, our apples better, our peaches and pears surer than in the northern states, and Chicago, the Queen City of the lakes, and central depot for the trade of the northwest, will accept our early fruits, which are three or four weeks in the market before those of Ohio and Michigan.

But it is more particularly to the southern trade we would call your attention. One-half of the western continent lying south of Kansas is ready and anxious for our fruits. But very recently has this market been opened to us, and a pathway made for the productions of Kansas to the Gulf. The thought of what has been done for Kansas during the last year, is astounding, and beyond our comprehension. Shall we stop and reflect for one moment upon the vast territory that has so recently been opened to our commerce.

To say nothing of New Mexico and the western and Rocky Mountains, the Empire of the Lone Star, and the Indian country, what have we beyond; aye, and forever beyond the limits of productions of all northern fruits? Nothing less than the other half of the western continent, embracing all its tropical regions, now and forever a market for the green, the dried, and the canned fruits of Kansas.

The fruit business cannot be over done. Kansas in soil, in climate, in altitude and the assurance of her short history, the trial and experience of her noble sons through good and evil report, failure and success, is to-day pre-eminently the central garden of the Union, and in her prospective importance as a fruit growing state has no peer.

Time is money, but ten times more so to the pomologist. No man, be he ever so poor, should let a year pass without planting a tree, and from one to many. The people in Southeastern Kansas have sadly failed in this respect, and we have too many cheerless, naked homesteads, with no trees, no birds, or flowers and vines affording comfort to the body, elevating the mind, soothing, softening and purifying the spiritual man, and fitting the soul for that rest above in Elysian fields.

We must improve on the past. There is everything to encourage. Temporary obstacles must be removed, and mistakes righted. We can profit from the experiences of the past. And by all means encourage and support the Kansas State Horticultural Society, which has been, is now and ever shall be our school master in the garden, the orchard and the vineyard, and Kansas will grow brighter and brighter in the Constellation of States, until she becomes a star of the first magnitude in brilliancy above them all.

At the hour of adjournment President Gale called the Society to order, and Dr. Warner, of Girard, read an Essay prepared by his wife.

WOMAN IN THE GARDEN.

AN ESSAY, BY MRS. WM. H. WARNER, OF GIRARD.

The subject of this paper suggests so many ideas bearing upon woman's work out of door that I find it difficult to determine upon a selection of any one point.

The first record of woman in the garden is found in the Bible, in the history of this world's creation, in the Garden of Eden. She was there placed by the hand of our Creator; a spot more lovely than any cultivated by the hand of man or woman since. Eve, the mother of our race, beautified it with her presence and among its clustering brightness of trees, flowers and clear waters she stood, fresh from the hand of God, in pristine beauty, its fairest flower. She walked a Queen amidst its groves and bowers, and found every tree, not only good for food, but pleasant to the sight.

Afterwards, through disobedience to God, came her banishment from that chosen spot—cast out upon the world to go forth to adorn and beautify it. And every daughter of Eve, possessed of good bodily health and a taste, can make to herself and those dwelling with her a home which shall be indeed an Eden upon earth.

The meaning of the word garden is not necessarily limited to a small space of ground, which women usually cultivate in flowers and culinary vegetables. Conceding the work of an out-door nature adapted to woman's hands, whether in the garden, at the door, or the more extended one of the field, vineyard and orchard, we shall find—household duties not conflicting—that she is able to be a helpmate of man upon a larger scale than the commonly accepted ideas of woman's work includes. Most prominent are those branches of farm and horticultural labor, which she can perform, the beautifying and adorning this garden; our adopted young State, where the virgin brow, even at this early period in history, is covered with nature's rarest garlands.

Much of the out-door work can be as easily performed as that within doors, and the change to the open air exercise would save many from an untimely grave.

There are many women here and there, scattered all over our State, who could well be spared from indoor work to go into the open field to pursue the science of horticulture and some branches of agriculture, and not only prove beneficial to themselves, but also increase the general good. Moderation must be given at first attempts, that her physical constitution may adapt its self to the change without too severe a tax upon her system. The new employment brings with it increased strength and, purer air, a better supply of life-giving elements, and consequently health and happiness. I have in my mind a young lady, a neighbors daughter, who for three summers past has practiced out-door work, finding time during noons to pursue her studies and practice her lessons on the piano; the very picture of health, and in the enjoyment of all the accomplishments of a true woman. To her, the consciousness of a true devotion to usefulness, that she is adding to the mutual comfort and happiness of others and struggling to make an Eden of her home, gives to her a joy, greater than all things else. What higher and nobler work could she, or

would she, wish to perform? All honor to this brave girl and to all others who do likewise.

Much of the work in vineyards can be easily done by women. The pruning and tying up, the layering for new plants, and the picking, sorting, and packing of the fruit is pleasant work and with her nimble fingers she can perform more rapidly than man, such work. Also, the cultivation and handling of all classes of small fruits can be profitably managed by her ready hands, and especially does her innate sense of beauty fit her for the cultivation of flowers; these in all their princely and innocent beauty are heaven's emblems, and kindred to woman's nature. Even in the humble walks of life, do you find her but to admire and love their beauty and fragrance. Then why should she not spend a part of her time in their associations.

The care of the kitchen garden, and the care of bees and poultry can be made a very pleasant and profitable employment for woman and a knowledge of the practical work on a farm sometimes proves of great advantage. A farmer's wife may be left alone to depend upon her own exertions in securing a support for a family of helpless children, and in such circumstances does such knowledge become almost indispensable to a maintenance.

In conclusion I would say, don't understand me to infer that farming should be done in preference to indoor work. Perform the duties of the household faithfully; be true to your family cares, which will add comfort and happiness to the fireside circle, but, at the same time, vary your labors, make it in and out of doors, as a knowledge of both will give to you an independence beyond the reach of poverty and become to you a powerful arm with which to support yourself through life.

Thanks were voted Mrs. Warner, for her valuable paper.

It was moved that the Secretary be instructed to respond to the communication received from Dr. Wm. M. Howsley, former President, regretting the necessity of his absence. Upon this motion, G. Y. Johnson said: I notice that the Secretary has placed the name of Dr. Wm. M. Howsley, Ex-President of this Society, upon the list of Life Members, and I learn that he has done this as an earnest of the respect and appreciation for the valuable services rendered this society as a member and officer.

Dr. Howsley has been connected with this Society from its very first existence; a hearty co-laborer and strong supporter of its interests; a persistent investigator of the hidden mysteries of horticulture, and through his efforts many facts have been developed of great value to the cause. His long service as President, and his venerable age fraught with practical experience, entitle him to our respect, and kindest considerations. This case is an unusual one, and this token of appreciation of his meritorious services is deservedly due at our hands, and I trust needs but a notice, to call forth your fullest approval. I would, therefore, move, that in addition to the motion, that he be declared a life member of this Society, and that the fee therefor be remitted, and that the Secretary be instructed to tender, by letter, to Dr. Howsley, this offering of the Society.

The motion of Mr. Johnson being accepted by the mover of the first motion, the motion as enlarged was unanimously concurred in by the Society.

Dr. De Ball, Chairman, offered the following report of the committee on final resolutions:

FINAL RESOLUTIONS.

Resolved, That the sincere thanks of this Society are hereby tendered to the citizens of Ft. Scott for their kind and generous hospitality, so freely bestowed upon us during the session just completed.

Resolved, That our warmest thanks are due to the Bourbon County Horticultural Society, for its untiring efforts in procuring and ornamenting the hall in which to hold this meeting.

Resolved, That we duly appreciate the courtesy of the officers of the Kansas Pacific, A., T. & S. F., M., K. & T. and Mo. R. Ft. Scott and G. railroads, in making such liberal terms for our attendance, and hereby tender them our thanks, and instruct our Secretary to furnish the Secretaries of the roads herein named, with a copy hereof, and lastly, but not least, we tender our warmest thanks to Col. McKinney and his estimable Lady, for the very excellent music which has enlivened our meeting.

The resolutions were adopted, and on motion of Mr. Milliken, the Fifth Semi-annual meeting adjourned.

G. C. BRACKETT, Secretary.

COUNTY REPORTS.

ANDERSON COUNTY.

By Judge M. A. Page, Garnett. G. C. Brackett: Dear Sir—The prospect for fruit in this county is very poor. There was no bloom on apple trees; pear trees bloomed profusely and were destroyed by grasshoppers; cherry trees also bloomed full and set fruit well, shared the same fate as the pears, except in a few cases, where they were a great distance from timber. Grapes light. Small fruits of all kinds in the central and northern portions of the county are entirely destroyed. In the south and western parts there has been but little damage. The grasshoppers are now passing the last molt. Those on the wing are moving northeast. Respectfully submitted. May 31st, 1875.

BROWN COUNTY.

By C. C. Grubb, Netawaka. G. C. Brackett, Sec'y.: Dear Sir—There

is no fruit of any kind in this part of the county. I have not seen a single apple or pear yet this season. The destruction of trees and vines by the winds and hot sun the past year was general. Peach trees are all dead; many of the apple trees are dead; the same with pear trees and many Early Richmond cherry trees; all our Concord grape vines are dead. In my own fruit grounds I have lost heavily of apple, peach and all my grape vines. The heaviest loss of apple trees being where they were well sheltered by a cottonwood grove on the south, west and north, while the same kind of trees, of same age, in the open grounds are not hurt. The cottonwoods forming the grove are forty feet high, and the first six rows to the north of it are the ones killed, and those beyond, where the wind strikes the ground, are very little, if any, injured. They were killed before we had any frost the past winter. Grasshoppers appeared August 7th and in forty-eight hours there was not a leaf on tree or vine left. At the same time the thermometer indicated 110°. Soon after the grasshoppers left, the trees began to leaf out and then I discovered the loss I had sustained. The peach trees did not leaf out, and have not to this date. Many of my neighbors cut down their peach trees in hope that they would throw up sprouts, in this they have been disappointed. The varieties of apples injured the most are the Sops of Wine, Keswick Codlin, Early Sweet, Bough—all dead. The English Golden Russet, half dead; Carolina Red-June, all dead where sheltered, not damaged outside of the influence of the grove; Rawles Genet, three-fourths dead. The Minkler has escaped all damage. Can you tell me of the quality of this variety? Mine has been planted five years and has not born any fruit.

In conclusion I would say it would take all the members of the State Horticultural Society and all the Agricultural Societies thrown in to raise me up this spring. I am just 90° below zero and have hoppers, chinch bugs, tree-peddlers, and humbugs all around me besides dead apple trees, peach, pear, cherry, grape vines and currant bushes. No fruit to be seen to raise the temperature one single degree. But stop! I have just discovered that my gooseberries have some life in them in the shape of a little green worm. Now for a fight! There is always something to keep us from getting the "blues" in Kansas. Respectfully submitted. May 30th, 1875.

A question arising as to the cause of the death of the trees on the north side of the cottonwood grove in the foregoing report, Prof. Gale was called out in the following opinion:

It will not be possible at this time to give in the five minutes which can be occupied in this discussion such an answer as the importance of the subject demands. One or two points, however, should be noted.

1. Fruit trees will always suffer when growing near to dense and large wind breaks, by the exhaustion of the moisture. This result will follow as far as the roots of the shade trees reach. All trees growing within this distance of a wind break will suffer more or less every season. Very dry seasons the results will be always disastrous. But trees located even beyond the influence of the roots of the wind break will suffer under certain circumstances. If Mr. Grubb's trees were located upon level ground, it is well known that for a distance of about 30 rods north of the wind break described in Mr. Grubb's letter, the apple trees must stand in a more quiet atmosphere when the hot winds were blowing from the south. Without motion the atmosphere would become intensely hot, rising at the ground near the trunks of the trees to 130°. Even this would be harmless, probably, if the trees had not been defoliated. But when the trees were left without leaves the circulation of sap must cease, and, as a consequence, the trees were gorged with a stagnant and partially elaborated sap. This sap would soon become diseased and no other result could be anticipated, than the death of the trees.

We should guard, then, against planting wind breaks too closely to our orchards, and especially against allowing them to become too dense. It should always be remembered that the orchard becomes from the nature of the conditions a partial self-protector.

JACKSON COUNTY.

By Wm. F. Creitz, Holton. G. C. Brackett, Sec'y.: Dear Sir—In response to your inquiries of the 24th inst., I am pained to state that the apple, pear, cherry, peach and grape crop will be nearly a total failure in this (Jackson) county. In a few isolated instances there will be some apples and grapes, but scarcely any peaches, cherries and pears. About all the grape vines in this county are totally destroyed. I shall have a fair crop of grapes, having saved my vines and fruit the past fall by keeping the grasshoppers from eating the leaves. Many of our best and oldest apple orchards are ruined. First, by the grasshoppers stripping the trees of all their leaves and afterwards the hot sun scalding the south side of the trunks subjecting them to attacks of borers. Recently planted orchards have stood it the best. All old peach trees are killed and tens of thousands of apple trees are entirely killed in this county. Raspberries and strawberries will yield a meagre crop, where plants have escaped the severity of the past season. Blackberries badly winter-killed, prospect of a fair crop where uninjured. Gooseberries scarcely any. I am yours, very truly. May 28, 1875.

NEOSHO COUNTY.

H. A. JACKSON, NEW CHICAGO, KANSAS.

G. C. Brackett, Esq., Secretary Kansas State Horticultural Society.

DEAR SIR:—Nothing would give me greater pleasure than to be able to participate in the exercises of the Convention of Horticulturists assembling at Ft. Scott on June 2nd. That pleasure being denied me, I ask you to do me a kindness by reading

this article to your Convention, should you deem it worthy a place in your exercises.

In the Spring of 1872, I planted an orchard consisting of the following varieties of fruit: 350 apple trees, 700 peach trees, 400 pear trees, 160 cherry trees and 250 grape vines. I have never seen a country better adapted to fruit raising than Kansas, so far as the rapid and healthy growth of the tree is concerned. In my opinion, there is no need of loosing a tree by the borers.

For three years I have not allowed a weed to grow on my place. The result is, that while my neighbors, with scarcely an exception, have been more or less troubled with the borers entering their trees at the surface of the ground, (peach trees, I am told, suffer most), I have never found one in that locality. Last year I lost but three apple trees by borers. They entered the trees some two feet above the ground. They had got well into the tree, and when I discovered it, I went to work and dug every one out. I then gave the trees a thorough washing with soap suds made from soft soap, and very strong, washing them well upon the limbs.

This I did twice during the year. I went over my entire orchard some three weeks since, and intend to again in about ten days. This is a cheap and most effectual preventive against borers.

My apple trees look fine, as do all my trees except the pears killed by the blight. Last year and this, my peach trees hung full of peaches, and my grape vines full of grapes; but all to no good purpose, unless furnishing the grasshoppers and June bugs with some 100 bushels of peaches and 300 lbs. of grapes last year, and more than double that quantity this year.

Last year the June bugs took all my grapes. This year the grasshoppers ate all I have tried but three remedies on my grapes,—sulphur, Paris-green and mosquit bars. The June bugs would leave those vines which had no sulphur or Paris-green on them, and go to eating the vines which had. And the grasshoppers got away with all three; so that at this writing, I have neither a peach nor apple on my place.

I have tried but one thing this season to prevent the grasshoppers from eating my fruit; that was common tar, (coal tar is certain death to the tree,) and that, in my opinion, should be taken off as soon as July 1st. I noticed that it killed the leaves that come in contact with it. This tar I spread around the body of each tree, having fruit on it, commencing next to the limbs and extending down some ten inches. This kept them off for a short time. They seem to have no fear of getting stuck fast in the tar. The consequences were, they would plunge into the tar, making their way upwards until they could go no farther. Then others would try the experiment, until there would be a bridge constructed of dead grasshoppers, over which the live ones would pass. At present the grasshoppers are very numerous in my section of the state, and have been for over two months. There are three sizes. The oldest have nearly all got wings, and are beginning to leave. The June bugs are quite plenty. Of the two, June bugs and grasshoppers, I think the most destructive to peaches, and the hardest to keep off the fruit.

I now come to the subject of pear growing, which I fear can never be made profitable in Kansas. During the year 1872 and 1874, I lost but seven pear trees by blight, out of 400. During the last sixty days, I have lost over one-fourth of my whole number, many of them hanging full of fruit at the time. About one-half of my pear orchard is on an eastern slope; the other half is situated upon a western slope. Those upon the western slope have suffered most from blight; so that I sometimes think that it is caused by the hot rays of the sun.

I have seen but one remedy given for pear blight, which I thought worthy of trial. It is given by Wm. Saunders, who has charge of the public grounds at Washington. He says he has tried it, and found it effectual for pear blight. It is: "To one peck of lime, add two pounds of sulphur, slack to the consistency of whitewash, and when applied, add to each half gallon of wash, one-fourth ounce of carbolic acid. Apply this to the diseased part. Where the bark is diseased, remove the outer portion before making the application."

I find that in my case, Standards do much better than Dwarf. I have 100 Standard Bartlett, nearly all of which are looking well at this time. I do not think I have a dead Beurre d'Anjou. The balance consists of Duchesse, Vicar of Winkfield, Flemish Beauty, Belle Lucrative, Madeleine, Blood good, Sheldon, Howell, Buffum, Seckle and Tyson. These last named varieties, I am unable to give a reliable account of, as the diagram of my pear orchard has been lost. I planted ten varieties of grapes. The Delaware the only one I have failed to raise. The Concord, however, is the grape to raise for profit. I will now give you my experience in setting out trees last spring. I put out an orchard consisting of apple, 50, and peach, 1700.

The grasshoppers not content with eating off all the foliage from these young and tender trees, set about stripping them of their bark. In many places eating into the very wood. Before I was aware, many hundreds of these young trees were killed. I at once began wrapping those not yet killed, with cloth. I am not sure as that will save them, as the hoppers seem bound to eat both cloth and trees.

I think the grasshoppers a good judge of the different varieties of peaches; for I notice they have killed nearly every Alexander, Amsden, Early Beatrice, and that class of peaches on my place. Doubtless the bark on a dollar tree tastes much sweeter to them, than that of a ten cent tree. They do not damage the apple tree to the extent they do the peach.

I now come to the subject of Evergreens, of this class of trees, I have 350, viz: Austrian, Scotch and White Pines, Red Cedar, Norway Spruce, Irish Juniper, Balsam Fir, and American Arborvitae, ranging in size from four to seven feet.

In the growing of evergreens I have been very successful, until the last ravages by the grasshoppers. Most people call it luck.

Not a bit of it. I can take any number of evergreens and grow as many of them as can be grown out of the same number of apple trees. Remember that I do not say that there is not more care to be taken in handling an evergreen, than an apple. They require more care in transplanting than any other tree. Out of 168 set out by me, in 1875, but 4 died.

The moment the little fibers become dry, that moment the evergreen is dead to all intents and purposes. The same is true when ever an evergreen after being transplanted is blown about by these Kansas winds until the dirt is pressed away from around the body, allowing the air to get in between the roots of the tree and the dirt. I believe as many evergreens are killed in this way as in any other.

I put plenty of sawdust about each tree, so that in case the tree should move about, the sawdust will work into any crevice that may be made.

A word concerning those varieties which I have found best suited to the locality in which I live. The American Arborvitae, I have failed to keep alive longer than three years from the time of setting them out. The Irish Juniper does not live any longer. The Norway Spruce does not thrive well with me. The Scotch Pine does well, if it was not for grasshoppers; they seem to prefer this to all other varieties, having killed quite a number for me. The Balsam Fir does well, but is a great favorite with the grasshoppers. My White Pines are looking splendidly, as also my Red Cedars. Many of the White Pines about me have been badly injured by grasshoppers. As yet they have done no serious injury. The Savin flourishes finely; but the evergreen that does best with me, and I may add, the only one which grasshoppers never molest is the Austrian Pine. It is usually considered one of the hardest varieties to make grow, yet, I have never lost one; so that I have about concluded, that had I an order to make out for 100 evergreens, I should write it thus: "Seventy-five Austrian Pines. And the remaining twenty-five, Austrian Pine, also."

June 1, 1875.

SHAWNEE COUNTY.

BY A. RIPLEY, TOPEKA, KANSAS.

Mr. G. C. Brackett, Secretary:

DEAR SIR:—In compliance with your request, concerning the fruit prospects for 1875, in this county, I regret very much to be compelled to make so unfavorable a report.

Apples, a total failure. Pears and peaches, nearly a failure. Cherries and plums, about one-third of a crop.

Raspberries and blackberries were badly sun burned last summer and damaged by the winter in many places, about one-fourth a crop.

Grapes, one-half a crop. And after all such discouragements, the grasshoppers are herein abundance, adding trouble to trouble. If these continue the work of destruction two weeks longer there will be no fruit left. Already are they cutting the peaches, and bark off of young apple trees. They are doing much damage. Respectfully submitted. June 1st, 1875.

JOHNSON COUNTY.

By Wm. Maxwell, Edgerton.

G. C. Brackett, Sec'y.: Dear Sir—The fruit prospects in this county were never less promising than at this time. In early spring we thought there would be a crop of peaches, but late frosts and a weakly condition of the tree has disappointed us. The fruit dropped largely leaving a very few upon the tree. Apples have failed from some causes. Blackberries severely damaged and in some instances killed. The Western Triumph, a new variety, is not killed. Among the raspberries the Doolittle and Miami promise a fair yield, though some are slightly injured. Strawberry plants were nearly all killed the past season. Gooseberries—the Mountain Seedling promises well; other varieties, half a crop. Currants a failure. Plums—the Wild Goose, Miner and selected wild varieties promise a good yield. Cherries, one-fourth crop. The grasshoppers will probably close out what little show we now have. Respectfully submitted. May 27th, 1875.

The American Pomological Society will hold its fifteenth biennial session in the city of Chicago, September 8, 9 and 10, 1875, and we solicit your presence and co-operation in making the meeting a success. The society will hold its meetings for discussions in the Methodist Episcopal Church, southeast corner of Washington and Clark streets. These will be attended, as heretofore, by leading horticulturists from all parts of the country. Under the auspices of the Illinois State Horticultural Society, there will, also, be held, in the Interstate Industrial Exposition building, a national exhibition of the fruits and other horticultural products of North America. Seven thousand square feet of space in the south end of the main floor and gallery of the great Exposition building will be assigned to the various States, Territories and Provinces; and in the space assigned to each State, Territory or Province will be arranged the State, county, society or individual collections contributed therefrom. It will be our effort to have every section of the country from Nova Scotia to California, and from Key West to Oregon, suitably represented in a truly continental exhibition of fruits; and to this end we solicit your personal effort and influence to secure a complete representation.

The Farmer's Union says: The Patrons of Hennepin county, Minnesota, have just held a session with the representatives of publishing houses of Harper, Scribner, and two other large establishments in the country, with a view of purchasing school books of them. They are tired of the county school superintendent and do not hesitate to say so.

THE ROCKY MOUNTAIN LOCUST.

Caloptenus spretus, Uhler.

BY PROF. F. H. SNOW.

Now that this scourge of vegetation is taking its departure, I desire to put upon record a few observations of the past two months. Upon the 8th of April I discovered the first young locust, upon the southern slope of Mt. Oread, just beyond the limits of the city of Lawrence (lat. 38 deg. 58 min.; long. 95 deg. 18 min.). This elevation is the termination of the high prairie, forming one of the bluffs at the intersection of the valleys of the Kansas and Wakarusa rivers. When first observed the young locusts in myriads were at rest upon the ground, some of them, however, feeding upon the leaves of the Indian Plantain (Cucullia tuberosa). They were very diminutive in size and when disturbed by my walking among them would hop only two or three inches high, looking very much like grains of sand in rapid motion upon a vibrating acoustic plate. The hatching took place, I soon learned, not only on the slopes of the bluffs but also in many spots in the "bottom" land, along roadsides and in fields of grass and grain. It was two weeks after the first hatching of the Mt. Oread colony that the editor of this paper caught 190 individuals at one sweep of the hand.

Not until about the 10th of May did the young locusts begin to move from their hatching grounds and cause serious apprehension among the farmers for the safety of their crops. At this time combined and systematic effort in neighborhoods infested would have prevented a large portion of the destruction which ensued. By the 20th of May it became evident that the various colonies of locusts would consume everything in the line of their march and that their ravages would only be arrested by their departure upon gaining their wings. Even at this late day, however, many were able to save portions of their crops by the ditching process. By this method three determined farmers uniting their efforts, destroyed 320 bushels of locusts by actual measurement in ten days time. On the 25th of May the destroying armies were entering the city of Lawrence in all directions and soon the desolation of gardens was almost complete. In two days beautiful lawns of blue grass were transformed into desert spots, as if they had been subjected to the burning heats of a long and rainless summer. The leaves upon the trees, however, did not share the general destruction, as the wingless gluttons could easily be kept from ascending. One citizen by persistent combat successfully defended his beautiful grounds, destroying in six days some 70 bushels of locusts. About one-sixth of the city, between the principal (paved) business street and the river, was not reached by the invading hordes, as was the case with occasional farms in the surrounding country.

In order to obtain a more correct idea of the immense numbers of the locusts, on the first of June I caught upon my own premises in a common butterfly-net one-half bushel in one-half hour. One quart of these contained by actual count 4,000 individuals, or at the rate of 128,000 to the bushel. Five days later, June 6th, they had nearly doubled in size, as one quart contained only 2,180 specimens, these being full grown pupae just ready to pass into the "imago" form. The first winged locust was seen on May 30th, its final transformation having been carefully watched in the University building. This gives a period of 55 days from the appearance of the larva to the first observed "imago." The winged locusts were first seen to rise for final departure on the 3d of June. By the 12th of June, just two weeks from the time the last pupa commenced, very few remained in the pupa condition. To-day, June 14th, nearly all have taken their flight from my garden, a few stragglers only remained behind, generally unable to fly on account of imperfect wings.

The direction of their flight I have carefully noted. When the wind is strong they fly with the wind. If the wind is light they fly towards the northwest; by what appears to be a natural instinct. Thus on June 7th, with a southwest wind, moving according to the University anemometer at the rate of three miles an hour, the locusts were flying in vast numbers in a direction a little to the north of west, nearly in the face of the wind. On June 12th, also, with a northeast wind blowing at the rate of four miles an hour, they were flying in greater numbers than ever before in a northwest course, at right angles to the direction of the wind. It is therefore my belief that the natural instinct of the winged locusts of the spring hatching is to move towards the northwest, and though they may be temporarily delayed by contrary gales, that they will sooner later, with ranks decimated by weakened constitutions and by the ravages of birds and parasites, arrive at their natural home in the mountains. It is even possible that none may live to reach the original home of the species. I do not consider the Eastern States to be in any danger from a locust invasion. I have observed hundreds of winged locusts fall to the ground during flight, either already dead or soon dying. These upon examination have generally proved to contain no parasites, and I judge that their death was in consequence of impaired strength, this second generation raised in an unnatural climate not equaling in vitality the first generation and succumbing to the fatigue consequent upon extended flight.

In regard to the natural enemies of the locust, I have observed a little external red parasite under the rudimentary wings of the pupae and sometimes upon the body and secondary wings of the imago. These are full grown mites, of the same class of insects as the spiders, and are not eggs, as some have supposed. They occur in numbers from one to a dozen upon a single locust and suck the life fluid from its body. I have also discovered several specimens of the Spined Soldier-bug (Arma spinosa) each with its jointed beak inserted in a locust of more than double its own size, and not leaving its victim until life was entirely extinguished. Finally, I am able to offer scientific proof that at least six species of birds feed upon the locusts, having found them in the gizzards of the Red-headed Woodpecker (Melanerpes erythrocephalus), Yellow billed Cuckoo (Coccyzus americanus), Cat bird (Mimus Carolinensis), Red-eyed Vireo (Vireo olivaceus), Great crested Flycatcher (Myiarchus cinerascens) and Crow Blackbird (Quiscalus versicolor).

The preceding account being based entirely upon personal observations of the writer at his own home, it must not be inferred that the ravages of the locusts have been equally severe in the whole State of Kansas. The destruction by these pests has been confined to a narrow strip on the eastern border of the State, Kansas, as a whole, never had finer promise of bountiful crops than at the present time, and a second planting will do much to repair the damage in the desolated district. The departure of the locusts has taken place more than two weeks earlier than at the time of the first visitation, eight years ago.—Obs. of Nat.

Patrons of Husbandry.

HOW TO MAKE A LIVE GRANGE.

An officer of a subordinate Grange called to get some blanks a few days since, which the late changes in the constitution rendered unnecessary. I suggested to him that if the members of his Grange each took a live Patron's paper, like the KANSAS FARMER, containing all the latest decisions, rulings and changes of laws, that such mistakes would be impossible. He said there were one or two (?) members of his Grange did take an agricultural paper.

In this connection we wish to present upon this subject, and a few points for the consideration of Patrons every where. In the first place, there is no one thing that will do so much towards keeping a Grange or community alive to the importance of many valuable things, as papers identified with the growth and prosperity. If every Patron took a paper he could watch the progress of the Order not only in his own state, but elsewhere; and not only this, but he would go to the grange fully alive to the issues and questions proposed and discussed in other granges. He would carry every week or every two weeks to his Grange interesting topics and valuable suggestions for the consideration of the members. The Grange to be of value, must be progressive, it must be intelligently informed, not only upon its legal and official obligations, but practically demonstrate each meeting its utility and importance. The forms and ceremonies are to the Grange, what the uniform is to the soldier, what the drill and discipline of the camp is to actual battle.

Let the committee upon "good of the order," see that every family comprising the Grange is supplied with a good agricultural paper identified with the Order. Thus will be introduced into every household, one of the greatest aids in keeping alive the interest in the Grange.

We have known communities, where two or three public spirited men have taken an interest in introducing good, wholesome reading matter, change its character in a marked degree; so great is the difference between a community that reads and one that does not. Banish from your homes the sensational trash that fills the average blood and thunder novel. Instead of the New York Ledger's, N. Y. Weeklies, the Fireside Friends, and the whole brood of dime novel love stories, give your families good wholesome reading matter.

The Grange can have a powerful influence upon this subject. The way to do this, or any other good work, is to go to work and do it. Organize a library for every Grange, and appoint your committees from the best material in your Grange to actively take hold, and thus assist in developing the educational feature of your Order. One more hint on committees for educational and social work, make half of each committee—women.

EDITOR FARMER

"PARLIAMENTARY GUIDE" NOTES.

A Grange cannot change its name or number after its charter has been issued.

A new Grange cannot be formed in the jurisdiction of a suspended Grange, during the time of its suspension.

At special meetings no business shall be transacted but such as is mentioned in the call for such meetings.

Thirteen members constitute a quorum when not otherwise prescribed by the by-laws of a subordinate Grange.

The courtesy of the chair may at any and all times be extended to a Past Master or visiting Master of another Grange.

A subordinate Grange cannot move its place of meeting within the jurisdiction of another Grange without the consent of the Grange whose jurisdiction is thus infringed upon.

The law which said that every member not voting should be counted in the negative was repealed, and now stands, "That every member present should be required to vote."

A master of a Grange is entitled to vote when a vote is taken by ballot or calling the ayes and noes, not otherwise, except in case of a tie, "in which case if he fails to vote, the question shall be decided lost."

ECONOMIZE.

Every cent taken from the subordinate Granges in excess of what is needed for the running expenses of the National and State granges is an unnecessary expense, and retards the growth of the order without securing an equivalent advantage. These necessary expenses could be very nearly approximated now, and the fees and dues should be reduced to the standard required by them. The salaries of all our officers except those of our active business agents should be fixed in such sums as would render the offices honorary rather than remunerative. We question the policy of holding our circuit judges down to \$1,500 a year and allowing some of the National Grange officers whose duties are not in comparison to get away with \$2,500; it looks to us like a reform in the wrong direction.—Michigan New Era.

NO ABUSE OF OFFICIAL POSITION.

We notice that all the leading agricultural and other papers, whether advocates of the farmers' movement from the first or only from a recent period, are very generally declaring, as this paper declared at the beginning of last winter, in favor of the supremacy of those broad republican principles through the practice of which control is based upon representation. The Order of Patrons is one of those institutions the absolute permanency of which is eminently proper and absolutely essential to the full development and maintenance of the farmer and his household. Nothing will so dampen the ardor of the subordinate membership as a persistent disposition on the part of those who are in official communication with subordinate granges to use the advantages so obtained to get up a remunerative trade in books, farm goods, grange jewels, &c., &c.—Western Farm Journal.

Brother John T. Jones, Master of the Arkansas State Grange, and a member of the executive committee of the National Grange, will spend the month visiting the New England cotton mills and workshops. He writes to Arkansas Grange as follows: "It has occurred to me that I might be able to secure some subscription to the stock of the companies now organizing in our state, for the establishment of cotton mills."

In Montana the Order seems to be doing well. A lady member sends the Rural Press, from Sheridan, Montana, a paper containing the proceedings of the meeting for perfecting the organization of a County Council for Madison county.

At a recent visit to Booneville, Dallas county, Iowa, we were pleased to notice a Grange elevator in operation at that point, in charge of a devoted member of the Order. The Grange at Booneville owns a fine hall, has a membership of 85, and meetings are held twice a month.—Farm Journal.

The Patrons at Albany, Oregon, have a warehouse that holds 120,000 bushels of wheat and they intend to fit up another one the same size, and a flouring mill that will grind 200,000 bushels of wheat this summer, so that they can flour their own wheat. A store is also projected, though the merchants of that vicinity have largely reduced their rates to Patrons.

Arrow cotton-ties have been sometime quoted at 5 cents per pound. Less than a year ago they were about nine cents per pound. Do Patrons consider the significance of this reduction? Do they know that it has been brought about through the Order, and that it is equal to a saving of very nearly if not quite \$1 on every bale of cotton raised, making a grand aggregate of nearly \$400,000.—Weekly Arkansas Grange.

Master T. R. Allen, of Missouri, in a letter to Colman's Rural says: All the partisan political sheets in the country, far and near, are now devoting a department in their columns to agriculture, or Patrons of Husbandry, in which they assume to teach farmers how to farm, to teach that of which they know nothing themselves. Could anything more ridiculous be conceived of them a political editor of New York or Boston teaching a Missouri farmer how to farm? Or indeed any other political editor? This is too thin, friends, let us put a stop to this thing. If we want to study and keep posted in party politics; let us take a political paper for that purpose. When we want an agricultural paper, let us take one for that purpose. Let us not mix things too much.

Let all officials avoid and conduct that by the severest criticism can be construed into a departure from principle or a straining of principle. The aim of the order is, after all, the profit of its members, and beyond the application of a very few general principles, its efficiency must depend very largely upon the character, wisdom and zeal of its individual members. Let there be the least possible interference of business of other people. It is all very well to insist on the omnipotence of the order, the wrongs of the agricultural class, the extortions of middlemen, but if there is only to be a replacing of one system of intolerance by another which only differs in form and not in character, the precise gain it is not easy to compute, and it would be as well to leave all talk of "principle" out of the question.—New York World.

HIGHLAND, DONIPHAN CO., KAN.

We have been here since 1855, and this county has never failed to raise enough to sustain its people, 1860 excepted, and some years there is a large surplus; but this year it looks rather discouraging. The grasshoppers are taking everything. In places where the grain is all gone, they are eating the leaves off the trees. The hazelbrush is as bare as in winter. The fruit is all gone and most of the leaves, and in some orchards they are eating the bark of the apple trees. We are afraid they will kill our orchards, as they are eating not only the leaves but the buds that have not put out yet.

There never was so much small grain sown here before, and I think I am safe in saying that not one acre will be harvested for every hundred sown. Every garden is gone; potatoes are all eaten, but we think they will come again; pasture is greatly damaged; there is some corn left; all kinds of business very dull. Everybody was taken by surprise, they thought there would be a few hoppers, but not enough to do much damage.

Although everything looks so discouraging, people are not going to idly fold their hands; they will plant again, some the last of this week, while others say wait until the last of next week. The greatest drawback is the lack of seed corn. A number of people have petitioned the county board to furnish several car loads, to be distributed among those who are not able to buy. The board meets to day and the result will soon be known.

The hoppers were first seen here with wings on the 31st day of May. A great many have wings now and some have gone. There are a great many that are not more than half grown, and some that are not near that large. I will say just now, for fear that I forget it, that I am going to take pieces of sod, about two or three inches square, make a little hole in the center and put in melon, cucumber and squash seeds; they can be laid on a board or in a box and kept moist; they can be kept in the house until the grasshoppers leave and come on faster than if the seed was just planted. We will all be so hungry for such things that we should try to gain all the time we can. I have tomatoes and cabbages in boxes now. I had a fine garden. Sixty large beds of onions and other things in proportion. It is all gone, but I am determined to have some vegetables. I think it is cowardly to sit down and whine, as some do. A defeat only makes me more determined.

A great many tried to kill the grasshoppers by burning, burying and rolling in the fields, and they tried to keep them out of the gardens by driving them and using salt and lime, but all to no avail. If all had tried, I think the crops might have been saved. What hatched in our own field, we caught as recommended in the FARMER, by digging holes and

driving them between, using cloth (we used carpet). When they began traveling we began ditching and digging deep holes in the ditches. From nine until four we stood, or rather walked, guard and kept them from crossing. They would go along the bottom of the ditch and jump into the deep hole; there would soon be so many in that they look like something boiling; but few could get out. When they stopped traveling the boys cover them with dirt, clean out the ditches and dig more holes. We worked that way for five days in succession, from daylight till dark without stopping for dinner, just eating a piece as we walked, but our enemies finally gained the victory. We were unfortunately situated, prairie on two sides and the adjoining farmers did not try to kill them. We got along very well while they only came in on two sides, but when they commenced on the third, we gave it up. We tried to induce our neighbors to destroy them, some had no faith and others were to busy. If they come again the farmers should organize, buy ditching machines and make a united effort to kill them. If all had worked as hard as we and others did, I am well satisfied the crops could have been saved. AUNT MARY.

OSBORN COUNTY.

EDITOR FARMER: They have come, was on the 8th inst. heard from the lips of the anxious farmer as he for the first time in the year "75 saw to his horror, the air filled with grasshoppers, winging their way towards the north pole, where we hope they will safely arrive, and there await the arrival of Queen Victoria's two ship loads of pole hunters, to be utilized by them after the plan of Prof. Riley, as small grains may be scarce over there. We hope the Prof. will soon prepare and publish a receipt book, that we, living in this country of grasshoppers, may have the benefit of his experience.

Yesterday and to-day grasshoppers were also passing northward in great numbers. None stopped in this vicinity. Fall wheat and rye will be ready for the sickle in ten or twelve days. Barley looks well and is in bloom. Spring wheat and oats are excellent. Corn not very forward, and but two-thirds of a stand, owing to poor seed and cold, wet weather at time of planting. Stock of all kinds doing well.

If the grasshoppers will be so kind as to keep away from us, we will, without doubt, have an abundant harvest. R. W. KNOX.

SULKY PLOWS.

ED. KANSAS FARMER: A. P. B., Earlton, Kansas, asks: "Are the sulky plows, in point of draft and work, what they claim for them?" In reply let me say that in quality of work they are unsurpassed; in draft, they are the weight of driver heavier. I use the "Kansas Clipper," manufactured at Ft. Scott by the Manufacturing Company of that name. I prefer it to all others.

First, its construction, always with any amount of team, a center draft. Second, one plow removed, shove the other plow and tung up in line and we have a complete two horse or ox rig.

Third, wrought iron beams, unobstructed with braces, increases the space between plow and ground, so it cannot choke.

Fourth, point of beam detached and we have an ordinary spring plow, for Gang's are not in order between rocks and stumps.

Fifth, riding enables any one to plow. A. P. B. should look upon wooden sulkys, or sulkys coupled to work coupled, as farmers now look upon mowers and reapers, one wheel concerns which serve us best, when let alone.

A word to my farmer friends: Men of education and business capacity have enlisted in our cause; extending their invitation to aid you, but you are not done with mental nonsense. I beg you to make haste and receive instruction, less they will become weary and with monopolies and middlemen are even buzzing like grasshoppers, and the devastation of the latter is only secondary to the first Kansas men, let us with all our might uphold home industry. N. P. W. Odessa, Allen Co., Kan., June 3, 1915.

TO CLEAN FOUL GUNS.—Guns and Rifles may be easily cleaned from lead by the following: If a muzzle-loader stop at the nipple or communication hole with a little wax, or if a breech-loader insert a cork in the breech; then tightly; next pour some quicksilver into the barrel, shaking it about for a few minutes. The mercury and the lead will form an amalgam, and leave the barrel as clean and free from lead as the first day it came out of the shop. The same quicksilver can be used repeatedly by straining it through wash-leather, for the lead will be left behind in the leather, and the quicksilver will be again fit for use.

It is well known that a little alum dissolved is very effective in clearing muddy water, but a short time since some alum was applied in a manner which, from its novel and its valuable results, is worthy of notice. In a place where water was scarce a little alum was dissolved in hot water and thrown into a tub of thick soapuds. In a short time the soap curdled, and accompanied by the muddy particles, sunk to the bottom, leaving the water perfectly clear, pure, and devoid of smell. This water was found very useful for washing clothing, when poured off the sediment. A similar result was attained in a quick manner by filling a boiler with soapuds, placing it on a fire, and throwing a bit of alum into it. When the suds boiled, the acum went over and left the water clear, soft, and useful for washing clothes as it had originally been.

It is reported that a somewhat juvenile dandy said to a fair partner at a ball: "Miss, don't you think my moustaches becoming?" to which Miss replied: "Well, sir, they may be coming, but they haven't arrived yet."

THE GLEN FARM HERD.

Public Sale!

Of 100 head of first-class

SHORT HORN CATTLE,

The property of J. S. LONG, Monroe, Jasper Co. Iowa, to be sold on

Wednesday, September First, 1875.

On the Fair Grounds, Des Moines, Iowa.

This herd was established in 1865, and no public or private sales of heifers has been made up to this time, and the purchases made from the different herds in the east during that period, together with the natural increase, has enlarged the herd so as to render it necessary to be reduced in size. The sale will comprise the entire herd over one year old, except few not in sale condition. Since the herd was founded care has been used to secure the services of the best males to be found in the country. Among them 8th Duke of Goodness, Plumwood Lad, Broadplate Jr., Major Duncan. The females are representatives of many of the most popular families of the day, and as for the individual merit of the entire lot, we can safely say are equal to any herd of like size ever offered for sale in the west. Terms of sale, six months credit, without interest if paid when due; if not, ten per cent. from date. Notes payable at First National Bank, Newton, Iowa. Liberal discount for cash. Catalogues on application. J. S. LONG, Monroe Jasper county, Iowa. Col. J. W. JUDY, Auctioneer.

N. B. The day after this sale, at same place, Dr. G. Sprague, D. M. Flinn and Mack Flinn, sell a large herd of Short Horns.

IMPORTANT SALE

SHORT-HORNS

Thursday, July 22d, 1875.

THE ENTIRE

"ASHWOOD" and "EDGEWOOD"

HERDS, numbering about 60 Females and 15 Bulls, will be sold publicly, without reserve, at ASHWOOD, 1/2 mile from Athens Station, E. L. & B. S. R. R., and 3 miles east of Lexington, Ky. In this offering will be found a large number of the best animals. Among the families represented may be mentioned: Imp. Rose of Wicken, Imp. Pride of the West, Louan, Masarka, Rose of Sharon, Duchess of Goodness, Atlanta, Moss Rose, Daisy, Duchess of Sutherland, Gem, etc.

Also, the following sires: 2d Duke of Oneda, 4th and 11th Dukes of Geneva, 14th Duke of Thorndale, 13th and 14th Dukes of Airdrie, 2d Duke of Wicken, Major, Broadplate, Muscaton, Malvolio, Geneva Lad, etc.

It is confidently asserted that a more favorable opportunity for procuring really choice Short-horns is rarely presented. Examination of the herds is invited. Catalogues ready about June 20th, and sent to applicants. Terms made known in Catalogue. Sale to commence at 10 o'clock a. m.

JAMES G. KINNARD, Chilesburg, Ky. E. S. CUNNINGHAM, Jr., Thompson's Station, Ky.

P. C. KIDD, Auctioneer. Attention is called to the following sales of Short-horns in this vicinity: July 21st, B. F. Vanmeter's; July 23rd, Handy & Lowry's; July 27th, Purcell's; August 1st, 2nd, 3rd, 4th & 5th; July 28th, Jas. Sudduth's.

FENCING REVOLUTIONIZED.

Effectiveness Doubled. Cost Reduced One-Half.



Attorney's Patent Wire Fence Barb. COST of Fence as above, exclusive of post, only 30 cts. per rod. Wire fence, old or new, made absolutely impassable. The barb is clasped immovably around the wire after the fence is built. Three wires barbed, posts one rod apart, has double the effectiveness of the best board fence ever built. Farmers, before building any more fence, or setting any hedge, examine into the merits of this fence. Enquire of your hardware dealers for samples and circulars, or address KENNEDY, BARNES & CO., Aurora, Ill.

CHAMPION

Force Feed Grain Drill,

AT REDUCED RATES.

Send for Descriptive Circular to H. REINSTEDELER, Wholesale Dealer in Farm Machinery, St. Louis, Mo.

NICHOLS, SHEPARD & CO'S.

"VIBRATOR" THRESHER.

The BRILLIANT SUCCESS of this Grain-saving, Time-saving THRESHER, is unprecedented in the annals of Farm Machinery. In a brief period it has become widely known and FULLY ESTABLISHED as the LEADING THRESHING MACHINE.



GRAIN RAISERS REFUSE to submit to the wasteful and imperfect work of other Threshers, when posted on the vast superiority of this one, for saving grain saving time, and doing fast, thorough and economical work. THRESHERMEN FIND it highly advantageous to run a machine that has no "Beaters," "Pickers," or "Aprons," that handles Damp Grain, Long Straw, Headings, Flax, Timothy, Millet, and all such difficult grain and seeds, with ENTIRE EASE AND EFFECTIVENESS. Citizens to perfection; saves the farmer his threshing bill by extra saving of grain; makes no "Litterings," requires LESS THAN ONE HALF the usual Belts, Boxes, Journals, and Gears; easier managed; less repairs; one that grain raisers prefer to employ and wait for; even at advanced prices, while other machines are "out of jobs." Four sizes made with 6, 8, 10 and 12 horse "Mounted" Powers, also a 22-horse "Self-Propelled" STEAM POWER, and to match other Horse Powers. If interested in grain raising, threshing, write for Illustrated Circulars (sent free) with full particulars of sizes, styles, prices, terms, etc. NICHOLS, SHEPARD & CO., Battle Creek, Michigan. CARDS, Bill Heads, Letter Heads, Statements etc., neatly and cheaply printed at the KANSAS FARMER Book and Job Printing Office, Topeka, Kansas.





Literary and Domestic.

EDITED BY MRS. M. W. HUDSON.

LABOR AND LITERATURE.

We read a great many things addressed to women and concerning women's work which sound as though they were written by persons who know nothing about work, and we feel somewhat fearful that many a practical, hard-working woman will turn from a perusal of M. J. W.'s plan for their improvement, which we copy from the N. Y. Tribune, with a similar conviction concerning her. Those stores of the "farmer's wife with a frail constitution," and of the woman with musical taste, we know that in real life mean that the latter has a very small family, and the former a very small portion of time to devote to reading and writing; but we hope these little inconsistencies will not prevent mothers from considering seriously the plan suggested of more closely connecting physical labor with literary recreation. It is a fact and there is no use in trying to disguise it, that the majority of wives and mothers read very little, and many of them say, truthfully, that they have no time. But with all such surely something is radically wrong in this age. How can we expect to raise intelligent children if we work all the time? No mother's mind can be constantly employed with her round of household duties, and if she does not learn by reading something of what transpires in other people's worlds, and see food for reflection in other people's thoughts, her mind will naturally revert to gossip, that poisoner of mind morals and manners. Some one asks if we think women gossip more than men, and answer we certainly do think there are more women gossips than men gossips. Not because women are naturally more debased, any more than they are naturally better, but simply because their work covers a smaller field, and consequently contracts their minds, unless they avail themselves of the enlightening, restful and helpful habit of reading.

Thousands of women conscientiously restrain from reading that they may devote every moment to work of some kind for the household. But it is a great mistake, and mothers in comfortable circumstances who are able to have help and yet make slaves of themselves for their husbands and children will generally find themselves rewarded in the course of time by snubs and slurs at their ignorance, and those of our readers who are in hard working circumstances only, we trust may find some help in the suggestions of the article we refer to. The only thing needed to secure to women all the rights they desire, is for them to overtaken and keep up with their husbands and brothers in intelligence, and rival them in capability in whatever they undertake. We would have women realize that it is just as much a duty with them, as with men to work in accordance with their strength, but we would have them judge of their own strength, and if they think they cannot live to raise their children if they keep a boarding house and take care of the milk of ten cows, besides their family household work of all descriptions, and child-bearing, then we would have them say that they must have help, and time to read at least as much as their husbands.

Mothers with silvery locks and care-crowded brows, bending over the burden of daily toil and crying out that you have no time for mental growth, here is a plan for you which has been tested and proved beneficial. When ever the labor is to be performed during the day, and especially in the evenings, is merely mechanical and does not require the mind's close attention—as is usually the case in well regulated households after the morning hours—ask each child in turn to read something useful, while you fashion their frocks. You will soon not only be astonished to see their eyes light up with new intelligence, but you will also find yourself revived. A preoccupied mind forgets the weariness of an overworked body. Moreover, children whose literary tastes are early developed by reading to their mothers are far safer amid the snares of after life, and far less likely to treat themselves to the debasing luxury of reading yellow-covered literature. You plan and plan and toil and toil to send your children to school, but in the evenings, with one longing look at the bookshelves and paper racks, you take up that great basket of rent garments and silently proceed to bind up their wounds, while those same bright-eyed boys and girls are tiring your nerves with their noisy inventions to fill the vacancies of child-life.

Give your boy a Roman history and encourage him to tell you what he finds in it, and you will soon find him devouring the history of the world with a Roman zeal. I know a little boy of only nine years, who has been accustomed thus to entertain his mother since he could read at all, and to-day he knows more history and literature than many a lad twice his age, and is so much attached to certain fine old poems that he will drop anything at any time to read them to her. Let your daughter, among other things, read to you receipts for making conveniences, with very little trouble, which will bring order out of chaos, or, as Shakespeare says, "give all things their systematic, orderly way of doing things." System, accompanied by philosophizing—"a process of winnowing the chaff of non-essentials from the wheat of essentials"—can almost perform miracles. How is it that some women have time to do so much work, and still leisure for reading and writing? Simply because they plan their work before hand with that end in view. Doubtless we never should have heard from that Illinois farmer's wife, had she not accompanied her churning and cattle-herding with reading. I know a farmer's wife with a frail constitution who took care of the milk from ten cows; in addition to the ordinary routine of three meals a day, with sweeping and dusting, filled her house with numberless contrivances and conveniences to make home attractive, had time to visit the sick, and time for reading and writing. She planned her work by the week; each day had its own duties, each meal its own dishes. I know another woman who had a special taste

for music, and who was so situated as to be obliged to do her own household work with very little assistance. Yet she found time to practice from four to six hours a day, not to the neglect of her neighborly duties, but to the neglect of her neighborly love labor less. I do not want to have women to read but literature more I want women to read more, or more women to read, so that when more of our sisters give us good advice it may be seed sown in good ground, which will bring forth fruit in abundance. When woman's work shall have become reduced to a science, when the farmer's wife shall avail herself of the improved methods of performing her part of the labor to the extent the farmer now does, when sewing machines shall come to us laden with a lighter load of tasks, ruffles and puffs, when all mothers shall become as careful to provide food for the minds of their families as for their bodies, then shall the amount of true happiness be increased." M. J. W. -New York Tribune.

NOB.

I taught a district school, and Bob was one of the pupils; that was the way I come to know him. This same Bob has been represented to me as a juvenile tiger, perfectly unmanageable in the school room, and I must confess that I felt uneasy forebodings when he reported at my desk among the C's. He looked neither formidable nor malicious. His face was much freckled, and his light hair was cropped close to his round head; his eyes were blue, keen, and wideopen, and his hands were stoutly built, and dressed in a buttoned jacket and corduroy trousers; he stood up straight with a manly air, and though he looked less childish than I should have liked, I was more favorably impressed than I expected. "What is your name?" "Robert Cromul." "Will you spell 'Cromul,' please?" "C-r-o-m, Crom, w-e-l-l well, Cromwell." I tried to write the letters as though they were just as I expected, and felt that they lent dignity to my register. He told me that his mother's name was Jane Cromwell, and he was seven years old; and so ended my first interview with the namesake of the great Protector.

Whether injustice had been done to Bob's character, or whether I was particularly successful, I do not know, at all events I had no trouble, and when it was reported to me that Bob had told in confidence that I was "a bully teacher," I felt as complimented as though the school commissioner had hung a medal round my neck.

Bob's home was a railroad "shanty," set far out in the fields. I could see it as I passed to and from school, and it looked not unpicturesque, standing in the shadow of a magnificent old elm. The proprietor, familiarly known in the neighborhood as the Major, was an American born German, stout, shrewd, and good natured, who went his rounds smoking, with his shirt-sleeves rolled up to his elbows, and a long leather apron tied under his arms. He boarded and lodged some twenty laborers who were employed on the railroad, there in process of construction. Bob's mother was his cook. Bob himself brought all the wood and water, went on errands and wheeled home provisions. He was always at school in good season and never seemed to find his confinement irksome. My only difficulty was to buy his active brain which was sure to plot some mischief if left to itself. He could scarcely read, so it was more difficult to find him employment. He learned to add little sums and made all sorts of attempts at writing in an old half-filled account book that the Major had given him. He was quick of comprehension, and in the various places where he had lived, had picked up considerable local knowledge, and often surprised me with his announcements and questions.

For a child reared in so rude an atmosphere, he had remarkable refinement and gentleness. He seemed to possess a sort of instinctive courtesy, and would often meet me at the school-gate and carry in my umbrella and lunch basket with a grace that could not have been improved. As is usual in country schools, I united the office of janitor to that of teacher, and he assisted in making fires, etc., with great good will. The children brought me flowers from their gardens at home; and Bob not to be outdone came with his hands full of stary dandelions and wild blue violets, with the dew of the May mornings yet in their eyes; and I thought what a type, in their lowly neglected beauty, they were of his own life.

He seemed conscious that his home had been different from that of others, for not far from the shanty was a farm house where he used sometimes to go of an afternoon to play with the children. When they were called in to tea, Bob always ran home in spite of repeated invitations to remain, until one day the children ran in to their mother urging "You ask Bob to stay, mother, he looks as though he wanted to," so the gentle mother, stepping to the door, said "Come, Bob, you will stay to supper won't you?" at which Bob smiled and said he did not know, then walked back to the house. On the door stone he told them he did not know how to do, he had only eaten in the shanty; but at the table appeared to better advantage than many of better breeding.

I was equally surprised and pleased to note that Bob was quite popular at school, for it was a neighborhood which prided itself, with reason, on its respectability. Most of the farms had changed owners only as they had passed from father to son since they were first cleared; the seminary in the adjacent village probably accounted for their unusual intelligence. So the entrance of so foreign an element as Bob into a crucible which had held the same compound undisturbed so long, was as strange and startling as must have been the passage of the railroad to the slumbering meadows. The children liked him for his good nature, admired his pluck, and looked with a pitying charity on his faults which were never imitated. One day he with a few others happened to be alone in the school room, when a rough looking man walked in; they were all somewhat alarmed, but it proved that he only called to inquire the way; one of the girls telling about it said, "We sat and trembled, but Bob took up the fire shovel as bold as could be. You ain't afraid of anything, are you Bob?" I remember one instance of his chivalry not quite so ludicrous. Fannie Cole, a plump, rosy-cheeked child of about his own age, had been very kind to him, and he in return "took her part" on all possible occasions. He burst in one noon so excited he could scarcely speak. "Johnny Burr has broken all Fannie Cole's dandelion chains," he stammered out. "Oh! well," said I, "she didn't care for them, did she?" "Her cried!" he returned laconically. He used to wait at the school-house door to

walk down with me at night. At first when I kept the even tenor of my way, he walked through all the mud-puddles, and scaled all the stone-heaps on the road, whether to display his dexterity or through bashfulness I was a little uncertain. After a few days he travelled more sedately, and told me of his black kitten and the Major's watch-dog, and how he meant to keep a shanty like the Major when he was a man. The Major seemed to be his ideal of human excellence, and I judged from some trifling remarks that he had received some training from that worthy personage. One night, just as we reached the place where he left the street to cross the fields, a squirrel ran along the fence, "Golly!" said Bob, with emphasis. "I don't really like the sound of that word, Robert, I had always called him Robert, thinking it would appeal more to his self-respect. "Do you?" said I, after the squirrel was out of sight. "Oh! I forgot," he replied apologetically. "Major pulled my ears for saying that the other day."

I became more and more interested in Bob, and wondered what the future had in store for him. Was this diamond to be crushed always with railroad mire, never to shine with polished brightness before the eyes of men? Would he see the probabilities of his life and carve out a way for himself or, would he be content to build, mentally and morally, like the Major? What ought to be done? What could be done? So, pitying and planning, I pondered, while another infinitely more wise and compassionate was making the crooked path straight to the feet of this "little one."

Three weeks had passed and Bob had not missed a day, so when the fourth Monday came and his desk was vacant, I judged some thing must have happened. I heard in the course of the week that he was sick with ague. Friday morning I met the Major with a basket of eggs, which article he furnished on Fridays for his Catholic boarders, and for which the farmers were glad to find a home market. "Good morning, sir," said I, "little Robert over at your house is sick, I hear." "Well, yes, mum, a purty strong touch of the ague he's having. Couldn't make out for three days what ailed him, but now we know what to do, we'll have him round in a fortnight."

"I hope so," I said warmly, "he is a bright little fellow, and I should be sorry to lose him from school." "Oh! yes, mum, Bobby's a keen one," he rejoined, nodding vigorously as he passed on. I heard no more from Bob for two weeks, when on Friday morning I again met the Major with his egg basket.

"Is Robert better?" said I. "Keen as a cricket mum." "Then I suppose I shall see him Monday?" "Well, no, mum, I guess not. Bobby's going to work on the Railroad Monday."

"To work on the railroad?" I repeated in astonishment. "Why, not a shoveling, I don't mean. He's going to carry drinking water for the men; gets his wages from the paymaster, though same as them." "But he is nothing but a baby," said I. "It is dreadful to put him to work like that." "I think not, mum, we've made him a little neck yoke, and the pails is light. Some thinks it will be better for him to be out in the air after that touch of the ague, too."

"But such a bright child as he is, it is a shame to keep him out of school." I went on indignantly. "Yes," he answered, "I think so myself, but you see 'tan't my affair. His mother's got four besides him, the oldest ain't but fifteen years old, scattered round here and there, and what's she to do? Her husband was killed six years ago down in Pennsylvania. Kept the next shanty to mine. They were building a railroad bridge and something or other was wrong about the derrick and the stone slipped out—just smashed him! I've hired her since and paid her good wages, but it's been a tough pull for a woman, I tell you! She thought if Bobby could earn enough to get him a suit of clothes, why, 'tould help along some."

I had no more to say, and went my way sorrowfully. Poor Bob! I had allotted much to the progress he would make that summer. Selfishly, may be, I had thought I might give his mind an impetus which would be felt in the years to come. Already he must gird himself to fight the wolf at the door! Perhaps in the struggle to keep body and soul united, all sparkle and spirit would be ground out forever!

June blossomed into July; July ripened into August. The summer term was nearly over, I still occasionally met the Major. The last time he stopped, his jolly face beaming. "You'd ought to 'ave seen Bobby last night, mum, when the Paymaster come around. After he'd settled with the men, he reads off, 'Robert Cromwell—\$12,' and Bob walks out kinder scared. 'Be you that gentleman?' says the Paymaster, laughing. Bob looked so little. 'Yes, sir,' and he hands over the money. Land o'liberty! he growed two inches in two minutes. I wish you'd seen him step round, and Major chuckled at the remembrance."

I had heard accidentally this morning that Bob had been out in a heavy thunder shower, had taken cold which had developed into a raging fever, and that the doctor who had been called in gave little hope of his recovery. I staid late in the school house at night writing, and as I came down the hill, half determined to go over to the shanty and ask after Bob, but hesitated, thinking I might be unwelcome. As I looked that way, a man crossed the fields, and waited at the fence, as I came up, he said heartily,

"The Major seen ye comin', mum, and sent me to ask would ye come over and see Bob." "Is he worse?" asked I. "He's just come to himself, and can't last long. He's talked a sight about ye and the school since he's been sick and the Major thinks he will know ye."

He turned abruptly, and I followed. The old elm cast its long shadow mournfully across the shanty, around whose open door stood groups of men with uncovered heads and a great dread upon their faces. I passed in through the room where the supper stood unattended, to an inner and smaller one, where on a bed pushed close to the narrow window, lay Bob, at the head knelt his mother, a tall, hard featured woman, at the foot stood the Major. I took the little hand that lay near me, saying—I hardly knew what, till the words jarred on my ear heartless and hollow in the presence of Death:

"How do you do, Robert? It is such a long time since I have seen you." He looked up, smiled sweetly, said "Good-night," then closed his eyes to open them in Eternity's morning. I went over the next day as soon as I thought the men would have gone to their work, for I knew they would be obliged to bury him early. He was already in his coffin dressed in the new clothes which he had never worn. His

mother knelt as she had done the night before, her eyes fixed upon the still smiling face. She seemed to have forgotten how to weep, and her features were rigid with despair. I tried to speak words of sympathy, but my poor phrases fell powerless as rain drops on the rock I folded some pannies respondent in purple and gold in the little cold fingers. Bob was a wild violet no longer, but a pansy made rich and rare in Heaven's sunshine. "He loved the flowers," she burst forth. "Oh! my Bobby! and the tears fell fast over her haggard face. I shut the door softly and left her with her head. Outside the sun poured down his happy radiance and the birds sang joyously as though beneath them were not the desolation of woe and the horror of great darkness."

Two mornings after, I met the Major walking heavily like a man with a burden. "Good-bye, Major," I said, holding out my hand, "I am going home to-morrow."

"Good-bye, mum," said he, grasping it warmly, "God bless you." I was going on without another word, when he said—

"I think, mum, as you always took so much notice o' Bob, you'll like to know that me and the boys have raised enough among us to get him a stone; a cross we're going to have with his name on't in black letters."

"How noble of you!" was all I could say. "It'll be a comfort to his mother, he went on, 'and it's the last thing we can do for Bobby,' and the tears stood in the rough man's eyes. I passed through the old place last summer on the new railroad. I strained my eyes to get a glimpse of the old elm tree, but the waving wheat covered all traces of the shanty. Where in our broad land were the sad eyed Mother, the kind old Major, and the generous Irish hearts, I could not tell; but I knew that Bob lay sleeping in the little Churchyard and that the diamond would gleam brightly in the day when our Lord should make up his jewels."

ADVERTISEMENTS.

HUDSON'S Practical Farm Account

AND REFERENCE BOOK. The farmers of the country have long experienced the want of a practical plan of farm accounts which would, without too much labor, enable them to keep clearly and succinctly their farm accounts, and an intelligent record of farm affairs. There have been many attempts at various times to occupy this ground. So far as our own observation goes, the failures which have marked nearly all these attempts up to this time arise: first, that the plans for keeping the accounts were either so intricate and expensive as to be refused on that ground, or so simple as to be merely a memoranda of affairs.

The preparation of the "Practical Farm Account and Reference Book" was suggested while the writer was engaged in farming, endeavoring to make the publications, which he was in possession of, answer the purpose of account books for the farm. The finishing of the work has been deferred from year to year, until the present time. In its scope and character it will materially differ from any similar work published combining an immense amount of practical information in tabular form, such as every farmer has felt the need of. Among its prominent features will be found all the many tables of weights and measures of any practical utility, No. of trees and plants per acre, at any given distance, amount of seed per acre for all kinds of produce, interest tables showing at a glance the interest in any given amount for any length of time, rates of interest in every State, tables giving wages due at any given rate per month or day for any given time, tables giving period of gestation in all animals, temperature of blood and pulse of animals, legal weights of grain, etc., etc., in each State, rates of postage, weights of various woods, comparative strength, legal forms of Deeds, Notes, Receipts, and a vast amount of Miscellaneous and valuable information for reference. This, in connection with the "account book," combining diary, ledger, inventories, register of crops, stock, etc., etc., bound in one book, finely printed and finished substantially, at a price within the reach of every farmer or his son or daughter can keep them, and thus secure to every farmer a systematic and business like history of his years operations, and whether they have brought him loss or gain. A table, giving more accurately its contents, will be published in the FARMER at an early date. It is expected that the cost of this book will not exceed two dollars, which will be very little more than the same size blank book is worth. In answer to a number of enquiries, would state that

THE FARMERS ACCOUNT AND REFERENCE BOOK WILL BE published about September 1st 1875. All orders and correspondence should be addressed to J. K. HUDSON, Topeka, Kansas.

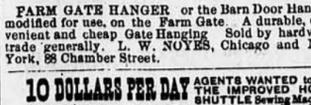


THE ONLY RECOGNIZED STANDARDS IN CANE MACHINERY are the Cook Evaporator and Victor Cane Mill.

21,000 COOK EVAPORATORS ARE IN USE, and 15,000 VICTOR CANE MILLS; ALL WARRANTED. They have taken the First Premium at 117 State Fairs.

All attempts thus far, to equal these unrivaled machines by other contrivances have SIGNALLY FAILED ON TRIAL. Planters can't afford to risk crops of Cane on light, weak, unfinished Mills that BREAK or CHOK, or, on common pans or kettles, that DO SECOND-CLASS WORK, and ONLY HALF ENOUGH at that.

The Sargo Hand-Book and Price-List sent Free. BLYMER MANUFACTURING CO., 664 to 694 West Eighth St., CINCINNATI, O., Manufacturers of Cane Machinery, Steam Engines, Shaker Threshers, Wood-sawing Machines, Corn and Cob Crushers, Farm, School, and Church Bells



10 DOLLARS PER DAY AGENTS WANTED to sell THE IMPROVED HOME SHUTTLE Sewing Machine. Address Johnson, Clark & Co., Boston, Mass.; New York City; Philadelphia, Pa.; Chicago, Ill.; or St. Louis, Mo. The KANSAS FARMER will be sent the balance of the year 1875, for \$1.00.

In answering an Advertisement found in these columns you will confer a favor by saying you saw it in the KANSAS FARMER.

THE KANSAS STATE Agricultural College

NOW furnishes a THOROUGH and DIRECT EDUCATION to those who intend to be FARMERS, MECHANICS, or to follow other Industrial Pursuits. THE FOUR COURSES OF INSTRUCTION, FARMERS, MECHANICS, BUSINESS and WOMEN, are prepared with express reference to these things:

- 1. What the student knows when received; 2. The time he will remain; 3. The use which is really made of a given science in his proposed occupation, the studies being so arranged that, at the close of each year, he will have gained that knowledge which is of most value in his business. THE FIRST OBJECT in each course is to make every student a Master of the English Language, and an Expert in its use; and also, skillful in Mathematics as employed in every day life, including Book Keeping, Business Law and Industrial Drawing. In addition the special object of the FARMERS COURSE

is to give him a practical knowledge of the Structure, Growth and value of Plants; of Light, Heat and Moisture, and of Inorganic, Organic, Analytical and Agricultural Chemistry, as these are related to Plant and Animal Growth; of Economic Zoology, and particularly of Practical AGRICULTURE AND HORTICULTURE, including such instruction and Drill in the Field, in the Handling of Stock, in the Nursery, and in the Wood and Iron Shops as will enable the graduate to Perform Readily each of the varied operations of Actual Farm Life.

In the other courses, the special studies are equally determined by the requirements of the proposed vocation. TO MECHANICS, applied mathematics and industrial drawing are given instead of botany, chemistry and zoology, as above; and Shop Practice in place of Practical Agriculture. The instruction in CHEMISTRY and PHYSICS is fully equal to that of the best eastern institutions, including Practice in Laboratories, and SUPERIOR ADVANTAGES are offered to students of Higher Chemistry, to Mineralogists, Druggists, Operators and Workers in Metals. Full collections of the Plants, Insects and Birds of Kansas are being made as rapidly as possible.

THE MECHANICAL DEPARTMENT

gives Daily Practice in the following well equipped Shops and Offices: 1. CARPENTRY, 2. CABINETRY, 3. WAGON, 4. BLACKSMITH, 5. PAINT, 6. SEWING, 7. PRINTING, 8. TELEGRAPH. THE COURSE FOR WOMEN is Liberal and Practical, including Instrumental Music. Each student is required to take not less than one Industrial and three Literary studies. TUITION ABSOLUTELY FREE, and no contingent fees, except for use of pianos and organs. Boarding ranges from \$2.75 to \$4 per week. Students PAID FOR LABOR on the Farm and in the Shops, which is not educational, and which the institution needs performed. THE NEXT TERM begins August 30, 1874, when New Classes will be formed. For further information apply to J. A. ANDERSON, President, Manhattan, Kansas.

The Patrons Mutual Insurance Association.

OFFICERS—BOARD OF DIRECTORS: M E Hudson, Master of State Grange; Wm Sims, Overseer; W F Popenoe, F H Dumbauld, J B Shaeffer, Executive Committee; A Washburn, Treasurer; S H Downs, Secretary. RATES.—The printed by laws and articles of association give the plan and rates. Our plan is to insure farm property belonging to Patrons. Our rates are based upon the experience of the Michigan Farmers' Mutual Insurance Association. In order to be safe, the Association fixes the rate at one-fifth higher than the average rate of all the companies in Michigan. The difference in the construction of buildings, and danger from prairie fires, adds something to risks in Kansas as compared with Michigan. We give the following as an illustration of the difference between our rates and joint stock companies. Joint stock company lowest cash rate, per annum on \$1,000.....\$5 00 On each \$1,000, for three years.....\$15 00 A policy fee of.....2 00-17 00 which amount is paid in advance. The Patrons Association rates are: A membership fee of.....\$1 50 On policy of \$1,000, first year premium, 25 cents on each \$100.....\$4 50 Total cash paid.....\$6 00 A policy is then issued for 3 years, and a premium note taken for the remaining 2 years of.....\$5 00 Total cost of insurance for 3 years.....\$9 00 The premium note is liable to assessment at any time to pay expenses and losses. On a policy of \$500 the cost is as follows: Membership fee.....\$1 50 Premium for first year.....\$3 75 Total cash payment.....\$5 25 Note for remaining two years.....2 50 Total cost for three years.....\$7 75 Our rates are about one-half of the joint stock companies rates, and only a small part of the premium required to be paid in cash. Address S H. DOWNS, Secretary, Topeka, Kan.

The Kansas Farmer BOOK AND JOB PRINTING

ESTABLISHMENT, Kansas Ave., bet. Sixth & Seventh, TOPEKA, KANSAS, Is supplied with the best Newspaper, Book and Job Presses, and the proprietors are prepared to execute, on the shortest notice, in a neat and workmanlike manner, and at the lowest living prices, every description of Job Printing.

Job Printing

From a Visiting Card to a mammoth Poster. We use the best of stock, employ competent workmen, deliver our work when promised, and guarantee satisfaction to our customers. Orders by mail promptly attended to. HUDSON & ROOT, J. K. HUDSON, Proprietors. FRANK A. ROOT.

THIS PAPER IS ON FILE WITH



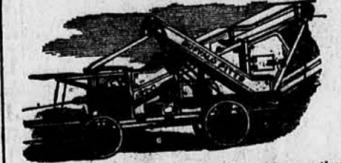
Where Advertising Contracts can be made.



Let us Smile.

An agricultural paper says that kind words will cure a cow of kicking, but many prefer the old way of mauling the critter with a fence rail until her heart is broken.

BUFFALO PITTS Threshing Machines, ORSE POWERS, & C.



ACKNOWLEDGED to be far ahead of any other machine ever built, for durability, fast threshing, cleaning, and saving grain.

Flax and Timothy.

Such as the END SHAKE SHOE, which has now been in use for two years, has earned the praise of every one who has used it.

Better Work, Faster Work, Easier Work.

Five sizes of Separators and Horse Powers made. Powers mounted on wheels as preferred.

1875 Mounted Powers.

The 1875 mounted power is a great improvement on that of 1874. Quite important changes are made in the construction of the power, which make it FIRMER, MORE DURABLE, MORE CONVENIENT, and EASIER TO DRAFF.

Noted all Over the World. Send for Illustrated Circulars, with full particulars of sizes, styles, prices, terms, &c., addressing JAMES BRAYLEY, Cor. Beach & Sebor St., CHICAGO.

Land Advertisements. The State of Oregon

Offers great attractions to those in search of new homes, to-wit:

Healthy and attractive diversity of surface. Grand scenery. Mild climate. No excessive cold or oppressive heat.

Death rate lower than in any other State. Soil of unsurpassed fertility, especially suited to cereals.

Great abundance of fruit. Stock raising very profitable. As a farming country, the State is not surpassed by any part of the Union.

Abundance of good and cheap public, railroad and private lands. Variety of timber of exceptional excellence for industrial purposes.

Great mineral resources, especially coal, iron, lead, gold and silver. Fine natural water system, vast water power.

Good market for agricultural products, owing to short transportation to the Pacific ocean, and direct exportation to all parts of the world.

Active commerce. Value of exports in 1874, Ten Millions of Dollars, Gold.

Every advantage enjoyed in civilized countries. Liberal laws. Good schools. Moderate taxes. Only nominal State debt.

Pamphlets, with Map and full descriptions of the State, and all needed advice and assistance, may be had, free of charge, on application to the Eastern Office.

Oregon State Board of Immigration. Room No. 8, Transcript Building, Boston Massachusetts.

500,000 ACRES OF Michigan Lands FOR SALE.

The Lands of The Jackson, Lansing & Saginaw R. R. Co., ARE NOW OFFERED FOR SALE AT LOW PRICES AND ON LONG TIME.

The Railroad is constructed and in operation from Jackson to Gaylord, a distance of two hundred and thirty-six miles, and will soon be completed to the Straits of Mackinaw, a further distance of about fifty-five miles.

Particular attention is called to the large tracts of the best White and Norway pine timber along the line of the road, and upon the An Seble, Cheboygan, Muskegon, and Manistow Rivers, the most important logging streams in the State.

The farming lands of the Company include some of the most fertile and well watered hard-wood lands in the State. Special attention is called to the farming lands in Crawford, Otsego, and Cheboygan counties, which are high and rolling, timbered mainly with the finest hard maple, soft, black sandy loam, and abundant in springs of the purest water.

For pine lands, one-fourth down, and remainder in three equal annual payments, with interest at seven per cent. For farming lands to settlers, longer time will be given if desired.

For title of lands, further information, or purchase, apply to O. M. BARNES, Land Commissioner, Lansing, Mich.

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.

DISCOUNT FOR CASH IN FULL AT DATE OF PURCHASE. For further information address, John A. Clark, LAND COMMISSIONER, Fort Scott, Kan.

Wholesale Grange Supply House. JOHN A. WEST, Successor to DICKINSON & Co., Has Removed to 213 West Madison Chicago.

WHOLESALE DEALER IN DRY GOODS, BOOTS AND SHOES, CLOTHING, HATS, CAPS, And General Merchandise.

GRANGES, FARMERS' CLUBS, AND ALL CONSUMERS supplied in any desired quantities. Catalogues of prices for spring and summer trade, containing full information regarding my manner of doing business will be sent free on application to any address.

All orders promptly and carefully filled 25 to 50 per cent less than retail prices.

W. H. Banks & Co. Wholesale & Retail Dealers in SEEDS, FERTILIZERS, TOOLS, & C. 34 & 36 S. Canal St., CHICAGO. Circulars sent free.

SENT FREE. THE BEVERLY BUDGET \$4 to \$75 CASH per week to all, at home or traveling. Something new. Address: The Beverly Co., Chicago.

SALE BILLS.—All in want of Sale Bills should call at and send to the KANSAS FARMER Job Office where the work will be done promptly and at the lowest living prices.

THE PROMINENT ADVANTAGES OF THE NEW LOW RESERVOIR "STANDARD"

Are Economy in Price, Superior Construction, Quick & Uniform Baking.



Great Durability & Handsome Designs, And Giving PERFECT SATISFACTION Everywhere.

MADE ONLY BY Excelsior Manufacturing Company,

612, 614, 616 & 618 N. MAIN STREET ST. LOUIS, MO. AND SOLD EXCLUSIVELY BY A. W. KNOWLES & CO., TOPEKA, KANSAS.

Established 1869. Bischoff & Krauss, DEALERS IN

Hides, Furs, Tallow & Wool.

FOR WHICH THEY PAY HIGHEST MARKET PRICES IN CASH. Also, Manufacturers of Harness, Saddles, Whips and Collars. We keep the largest and best stock in the City and will not be undersold by any firm East or West.

No. 67 Kansas Avenue, North Topeka, Kansas.

Nurserymen's Advertisements. TO TREE DEALERS & NURSERYMEN.

OUR immense Nursery Stock, now covering over 300 acres, closely planted and comprising a general and complete assortment of fruit and ornamental trees, &c., together with the well known superior quality of our stock, enables us to offer great inducements.

We are fully prepared in every respect, to meet the demands of the wholesale trade. Send for wholesale Price List. BLAIR BROTHERS, Proprietors Lee's Summit Nurseries, Sept-15 Lee's Summit Jackson County, Mo.

EARLY CHAMPION GRAPE

BEST Early Grape known 3 weeks earlier than any other. It is superior to it in both beauty and quality. Fruit large and handsome. In every respect, to meet the demands of the wholesale trade. Send for wholesale Price List. DONNELLY & Co., Rochester, N.Y.

500,000 GRAPE VINES FOR SALE

CHEAPER than any where else. Concord-1 year, \$50 per 1,000; extra, \$40; 2 years, and extra select 1 year, \$45 to \$55 per 1,000. No one dare undersell me. Delaware, Martha, Iowa, Diana, European, Norton, Herbeumont, Catawba, Croton, Hartford and all other varieties cheaper than any where. Also all small Fruit Plants. Address Dr. H. SCHRODER, Bloomington Ill.

NEW FORCE-FEED Buckeye Grain Drill

10,000 DRILLS AND SEEDERS BUILT FOR 1874. Will sow any desired quantity without change of gear. Send for Circular. P. P. MAST & CO., Springfield, O.

RAILWAY PITCHING APPARATUS

Chapman's Best Work and Conveyor in use. Unloads and carries Hay, Grain, &c. over deep snow into sheds, barns, &c. Saves labor, time, money. Sent on trial. Circulars sent. Agents wanted. G. B. Weeks & Co., Syracuse, N. Y.

Self Propelled For Cripples

Can be easily operated on one hand. It is a new and different kind of chair. Please mention this paper. ling Chairs & Invalids, propelled, cith doors, by any use of hands. size, and send treated catalogue styles & prices. S. A. SMITH, No. 32 Platt St., N. Y. City.

\$200 A MONTH TO AGENTS

to sell the IMPROVED "HOME SHUTTLE" SEWING MACHINE, the only practical, low-priced "Lock Stitch" Sewing Machine ever invented. Address JOHNSON, CLARK & Co., Boston, Mass.; New York City; Pittsburg, Pa.; Chicago, Ill.; Louisville, Ky.; or St. Louis, Mo.

GLOBE CHURN

Every One Using it once will use no other. Three sizes made, holding five, seven and ten gallons. Circulars sent free. Overseas wanted where we have no agents.

ATTENTION, OWNERS OF HORSES.

Ask your Harness Maker for the ZINC COLLAR PAID, They are warranted to cure any sore neck on horse or mule, or money refunded, if printed directions are followed. Send for sample. Zinc Collar Pad Co., 112½ Main St., Buchanan, Mo.

CHEAP JOB PRINTING.

CHARLESTON JOB PRINTING HOUSE IN THE STATE connected with the office of the KANSAS FARMER. Send in your orders for job printing.

COLMAN & CO. COMMISSION MERCHANTS;

612 North Fifth St., LOUIS, MO. RECEIVE and sell all kinds of Produce, including Grain, Potatoes, Onions, Wool, Hides, Fats, Grass, and Clover Seeds, Butter, Eggs, Poultry, Game, &c.

Our long experience as Commission Merchants and our excellent facilities, enable us to get the very highest market rates. All letters of inquiry promptly answered. The Business of the

Patrons of Husbandry

is especially solicited, we are also the manufacturer's agents for the sale of the THOMAS SMOOTHING HAIRROW, for which circulars will be sent on application. We beg to refer to D. W. Adams, Master National Grange, Waukon, Iowa; O. H. Kelley, Secretary National Grange, Washington City; Gen. W. Duane Wilson, Secretary Iowa State Grange; T. R. Allen, Master Missouri State Grange; J. K. Hudson, Editor KANSAS FARMER, Topeka, Kansas.

Address or consign to COLMAN & CO., St. Louis Missouri.

12 Chromos for \$1.

The grandest chance ever offered agents. We will mail to any address, 12 beautiful Chromos, size 3 1/2 x 5 1/2, mounted, on receipt of \$1. Sell for \$3 in an hour. Try a Chromo agency, it is the best paying agency out. Everybody loves and buys pictures. We have work and money for all, men and women, boys and girls, whole or spare-time, daytime or evening, at home or travelling. Include \$1 in a letter, Chromos by return mail. They sell at sight.

WANTED Agents for the best selling Prize package in the world.

It contains 15 sheets paper, 15 envelopes, Pen, Penholder, Pencil, Patent Yard Measure, single package of Perfumery and a piece of Jewelry. Package with elegant prize, post paid, 25 cents.

BEST Expansion Balance, Nickel Movement; beautifully engraved Cases; and is equal in appearance to a Gold Watch that costs from \$60 to \$100. It sells and trades readily, for from \$25 to \$60. If you wish a watch for your own use, or to make money out of, try this. Price \$17 only. We will send this watch, C. O. D. subject to examination, if you send \$3 with the order, the balance of \$15 you can pay the Express Co. if the watch proves satisfactory.

ALL CAN make splendid pay selling our goods as Agents for Flour. Send stamp for our illustrated catalogue. Address F. P. GLUCK, New Bedford, Mass.

W. H. BANKS & CO. SEEDS.

A large supply of Field, Garden and Flower Seeds, WARRANTED PURE. Send for Price List. Comstock's Seeder, Hand Cultivator, Weeder, Strawberry Vine Cutter, Rhoeval and Mole Plow, Combined or Separate.

W. H. BANKS & CO., Wholesale and Retail Seedsmen, 34 & 36 S. Canal St., CHICAGO.

EPILEPSY or FITS.

A SURE CURE for this distressing complaint is now made known in a Treatise (of 48 octavo pages) on Foreign and Native Herbal Preparations, published by Dr. O. Phelps Brown. The prescription was discovered by him in such a providential manner that he cannot conscientiously refuse to make it known, as it has cured everybody who has used it. The ingredients may be obtained from any druggist. A copy sent free to all applicants by mail. Address Dr. O. PHELPS BROWN, 21 Grand Street, Jersey City, New Jersey.

Massillon Harvesting Buy the Best.

Requires description and bales either hay or cotton without tramping or stopping. Thirty bales of hay per hour. Twenty bales of cotton per hour.

Retailing Reapers at WHOLESALE PRICES.

FARMERS, send us your order with \$1.95 and secure one of Seiberling's EXCELSIOR MOWERS And Dropper Combined. \$40 less than the REGULAR RETAIL PRICE. Order early. PRIOR, BOYD & CO. WHEELING, W. VA.



Bake better, burn less fuel, give better satisfaction, and are the standard Stoves of the day. Extension Top Stoves, with High or Low Down Reservoir.

EVERY STOVE WARRANTED.

BUCK'S Guarantee,

For Coal or Wood, are the only Soft Coal Cooking Stoves that always give perfect satisfaction. They Bake, Broil and Roast equal to any Wood Stove; are fitted with our Patent Chilled Iron Linings, which last as long as any five sets of ordinary linings. Their operation is perfect.

Extension Top, with High or Low Down Reservoir. We also manufacture, Enamelled Work of all kinds, Culinary and Plumbers' Goods &c.

Buck & Wright, 720 and 722 Main Street, St. Louis. Manufacturers of varieties of Cooking and Heating Stoves. Sample Cards and Price Lists furnished on application.

TIN WIRE RINGS.

Will make a flag. New here. Hardware Dealers sell them. Rings, 1 1/2, 2, 2 1/2, 3, 3 1/2, 4, 4 1/2, 5, 5 1/2, 6, 6 1/2, 7, 7 1/2, 8, 8 1/2, 9, 9 1/2, 10, 10 1/2, 11, 11 1/2, 12, 12 1/2, 13, 13 1/2, 14, 14 1/2, 15, 15 1/2, 16, 16 1/2, 17, 17 1/2, 18, 18 1/2, 19, 19 1/2, 20, 20 1/2, 21, 21 1/2, 22, 22 1/2, 23, 23 1/2, 24, 24 1/2, 25, 25 1/2, 26, 26 1/2, 27, 27 1/2, 28, 28 1/2, 29, 29 1/2, 30, 30 1/2, 31, 31 1/2, 32, 32 1/2, 33, 33 1/2, 34, 34 1/2, 35, 35 1/2, 36, 36 1/2, 37, 37 1/2, 38, 38 1/2, 39, 39 1/2, 40, 40 1/2, 41, 41 1/2, 42, 42 1/2, 43, 43 1/2, 44, 44 1/2, 45, 45 1/2, 46, 46 1/2, 47, 47 1/2, 48, 48 1/2, 49, 49 1/2, 50, 50 1/2, 51, 51 1/2, 52, 52 1/2, 53, 53 1/2, 54, 54 1/2, 55, 55 1/2, 56, 56 1/2, 57, 57 1/2, 58, 58 1/2, 59, 59 1/2, 60, 60 1/2, 61, 61 1/2, 62, 62 1/2, 63, 63 1/2, 64, 64 1/2, 65, 65 1/2, 66, 66 1/2, 67, 67 1/2, 68, 68 1/2, 69, 69 1/2, 70, 70 1/2, 71, 71 1/2, 72, 72 1/2, 73, 73 1/2, 74, 74 1/2, 75, 75 1/2, 76, 76 1/2, 77, 77 1/2, 78, 78 1/2, 79, 79 1/2, 80, 80 1/2, 81, 81 1/2, 82, 82 1/2, 83, 83 1/2, 84, 84 1/2, 85, 85 1/2, 86, 86 1/2, 87, 87 1/2, 88, 88 1/2, 89, 89 1/2, 90, 90 1/2, 91, 91 1/2, 92, 92 1/2, 93, 93 1/2, 94, 94 1/2, 95, 95 1/2, 96, 96 1/2, 97, 97 1/2, 98, 98 1/2, 99, 99 1/2, 100, 100 1/2, 101, 101 1/2, 102, 102 1/2, 103, 103 1/2, 104, 104 1/2, 105, 105 1/2, 106, 106 1/2, 107, 107 1/2, 108, 108 1/2, 109, 109 1/2, 110, 110 1/2, 111, 111 1/2, 112, 112 1/2, 113, 113 1/2, 114, 114 1/2, 115, 115 1/2, 116, 116 1/2, 117, 117 1/2, 118, 118 1/2, 119, 119 1/2, 120, 120 1/2, 121, 121 1/2, 122, 122 1/2, 123, 123 1/2, 124, 124 1/2, 125, 125 1/2, 126, 126 1/2, 127, 127 1/2, 128, 128 1/2, 129, 129 1/2, 130, 130 1/2, 131, 131 1/2, 132, 132 1/2, 133, 133 1/2, 134, 134 1/2, 135, 135 1/2, 136, 136 1/2, 137, 137 1/2, 138, 138 1/2, 139, 139 1/2, 140, 140 1/2, 141, 141 1/2, 142, 142 1/2, 143, 143 1/2, 144, 144 1/2, 145, 145 1/2, 146, 146 1/2, 147, 147 1/2, 148, 148 1/2, 149, 149 1/2, 150, 150 1/2, 151, 151 1/2, 152, 152 1/2, 153, 153 1/2, 154, 154 1/2, 155, 155 1/2, 156, 156 1/2, 157, 157 1/2, 158, 158 1/2, 159, 159 1/2, 160, 160 1/2, 161, 161 1/2, 162, 162 1/2, 163, 163 1/2, 164, 164 1/2, 165, 165 1/2, 166, 166 1/2, 167, 167 1/2, 168, 168 1/2, 169, 169 1/2, 170, 170 1/2, 171, 171 1/2, 172, 172 1/2, 173, 173 1/2, 174, 174 1/2, 175, 175 1/2, 176, 176 1/2, 177, 177 1/2, 178, 178 1/2, 179, 179 1/2, 180, 180 1/2, 181, 181 1/2, 182, 182 1/2, 183, 183 1/2, 184, 184 1/2, 185, 185 1/2, 186, 186 1/2, 187, 187 1/2, 188, 188 1/2, 189, 189 1/2, 190, 190 1/2, 191, 191 1/2, 192, 192 1/2, 193, 193 1/2, 194, 194 1/2, 195, 195 1/2, 196, 196 1/2, 197, 197 1/2, 198, 198 1/2, 199, 199 1/2, 200, 200 1/2, 201, 201 1/2, 202, 202 1/2, 203, 203 1/2, 204, 204 1/2, 205, 205 1/2, 206, 206 1/2, 207, 207 1/2, 208, 208 1/2, 209, 209 1/2, 210, 210 1/2, 211, 211 1/2, 212, 212 1/2, 213, 213 1/2, 214, 214 1/2, 215, 215 1/2, 216, 216 1/2, 217, 217 1/2, 218, 218 1/2, 219, 219 1/2, 220, 220 1/2, 221, 221 1/2, 222, 222 1/2, 223, 223 1/2, 224, 224 1/2, 225, 225 1/2, 226, 226 1/2, 227, 227 1/2, 228, 228 1/2, 229, 229 1/2, 230, 230 1/2, 231, 231 1/2, 232, 232 1/2, 233, 233 1/2, 234, 234 1/2, 235, 235 1/2, 236, 236 1/2, 237, 237 1/2, 238, 238 1/2, 239, 239 1/2, 240, 240 1/2, 241, 241 1/2, 242, 242 1/2, 243, 243 1/2, 244, 244 1/2, 245, 245 1/2, 246, 246 1/2, 247, 247 1/2, 248, 248 1/2, 249, 249 1/2, 250, 250 1/2, 251, 251 1/2, 252, 252 1/2, 253, 253 1/2, 254, 254 1/2, 255, 255 1/2, 256, 256 1/2, 257, 257 1/2, 258, 258 1/2, 259, 259 1/2, 260, 260 1/2, 261, 261 1/2, 262, 262 1/2, 263, 263 1/2, 264, 264 1/2, 265, 265 1/2, 266, 266 1/2, 267, 267 1/2, 268, 268 1/2, 269, 269 1/2, 270, 270 1/2, 271, 271 1/2, 272, 272 1/2, 273, 273 1/2, 274, 274 1/2, 275, 275 1/2, 276, 276 1/2, 277, 277 1/2, 278, 278 1/2, 279, 279 1/2, 280, 280 1/2, 281, 281 1/2, 282, 282 1/2, 283, 283 1/2, 284, 284 1/2, 285, 285 1/2, 286, 286 1/2, 287, 287 1/2, 288, 288 1/2, 289, 289 1/2, 290, 290 1/2, 291, 291 1/2, 292, 292 1/2, 293, 293 1/2, 294, 294 1/2, 295, 295 1/2, 296, 296 1/2, 297, 297 1/2, 298, 298 1/2, 299, 299 1/2, 300, 300 1/2, 301, 301 1/2, 302, 302 1/2, 303, 303 1/2, 304, 304 1/2, 305, 305 1/2, 306, 306 1/2, 307, 307 1/2, 308, 308 1/2, 309, 309 1/2, 310, 310 1/2, 311, 311 1/2, 312, 312 1/2, 313, 313 1/2, 314, 314 1/2, 315, 315 1/2, 316, 316 1/2, 317, 317 1/2, 318, 318 1/2, 319, 319 1/2, 320, 320 1/2, 321, 321 1/2, 322, 322 1/2, 323, 323 1/2, 324, 324 1/2, 325, 325 1/2, 326, 326 1/2, 327, 327 1/2, 328, 328 1/2, 329, 329 1/2, 330, 330 1/2, 331, 331 1/2, 332, 332 1/2, 333, 333 1/2, 334, 334 1/2, 335, 335 1/2, 336, 336 1/2, 337, 337 1/2, 338, 338 1/2, 339, 339 1/2, 340, 340 1/2, 341, 341 1/2, 342, 342 1/2, 343, 343 1/2, 344, 344 1/2, 345, 345 1/2, 346, 346 1/2, 347, 347 1/2, 348, 348 1/2, 349, 349 1/2, 350, 350 1/2, 351, 351 1/2, 352, 352 1/2, 353, 353 1/2, 354, 354 1/2, 355, 355 1/2, 356, 356 1/2, 357, 357 1/2, 358, 358 1/2, 359, 359 1/2, 360, 360 1/2, 361, 361 1/2, 362, 362 1/2, 363, 363 1/2, 364, 364 1/2, 365, 365 1/2, 366, 366 1/2, 367, 367 1/2, 368, 368 1/2, 369, 369 1/2, 370, 370 1/2, 371, 371 1/2, 372, 372 1/2, 373, 373 1/2, 374, 374 1/2, 375, 375 1/2, 376, 376 1/2, 377, 377 1/2, 378, 378 1/2, 379, 379 1/2, 380, 380 1/2, 381, 381 1/2, 382, 382 1/2, 383, 383 1/2, 384, 384 1/2, 385, 385 1/2, 386, 386 1/2, 387, 387 1/2, 388, 388 1/2, 389, 389 1/2, 390, 390 1/2, 391, 391 1/2, 392, 392 1/2, 393, 393 1/2, 394, 394 1/2, 395, 395 1/2, 396, 396 1/2, 397, 397 1/2, 398, 398 1/2, 399, 399 1/2, 400, 400 1/2, 401, 401 1/2, 402, 402 1/2, 403, 403 1/2, 404, 404 1/2, 405, 405 1/2, 406, 406 1/2, 407, 407 1/2, 408, 408 1