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Horticulture.

KANSAS STATE HORTICULTURAL SOCIETY.

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

WEDNESDAY AFTERNOON.

Discussion having been closed upon the essay of J. B. Saxe, of Ft. Scott, on the subject of Small Fruits, Mr. D. B. Skeels, of Galesburg, read the following paper:

MR. PRESIDENT:—I congratulate you upon the prospects of a successful, pleasant and profitable meeting. As a society, we have a great work to perform in reclaiming these vast prairies from the state of comparative nudity in which we still see them; and trees are the remedial agents, and the only ones.

But here, I wish to remark that this assertion is not advanced because I am growing trees to supply the demand in my section, and expect to reap a benefit from this mode of advertising. The opinions that I here advance, I make with all sincerity. I do not wish to grind my professional axe at this meeting; therefore, relying on your confidence, support and hearty co-operation, my efforts shall not be relaxed, but put forth for the advancement of our Horticultural Society, and the noble cause in which we are all so deeply interested.

And as I said before, trees are the agents by which these vast tracts of land are to become a source of enjoyment, of profit and wealth; it is for us to direct in respect to varieties best suited to the various ends desired; and how these are to be arranged so as to combine, at the same time, the most pleasing effect to the landscape, and yield the largest profit to the owner. Our first and chief effort must be to instruct the masses of the people through every available channel of communication in regard to the benefits which will accrue to themselves and to their children by engaging at once in this great work. They must be induced to plant orchards. We must not only show them the pecuniary profits of fruit growing, but the healthy influence upon the human system, of the free use of ripe fruit; for it is the testimony of our greatest and most scientific physicians, that not one-fourth the amount of fruit is used by the American people that should be used to promote their highest health. They must be persuaded to plant groves and belts of trees, by showing them the great value of these in sheltering their stock, and preserving their crops from the destructive effects of our violent winds and tempests. True, we have said and written much upon this subject; so much that we almost tire of repeating the facts and figures by which it is so easily demonstrated. Yet, we who realize the importance of our work, and know the certainty with which such protection may be rendered, should not relax our efforts to convince others until the desired end is gained; until these terrible storms, which so often sweep over our prairies destroying vast amounts of property, and sometimes life itself, shall either be numbered with the things that were, at least their force be so far broken that they will be comparatively gentle and harmless.

This is known to be no fanciful result, but one which is entirely in accordance with nature's law.

I have thus called your attention to a few items of our future labors. Many more might be added, but time and space warns us to be brief. We are just entering our sphere of usefulness; we have but just taken one step of a journey in which many thousands are to be taken; each succeeding one which promises its own reward, disclosing new beauties as it leads us on, and directs to a nearer approach to perfection just beyond.

Many serious obstacles, however, lie before us; the innumerable multitude of insect tribes seem to bid defiance to our skill, threatening to destroy the most desirable in fruit and flowers.

"These enemies must be met and vanquished." There are remedies for the destruction of each specie that are among us. It is our work to discover and apply these remedies. Let us seek for a more thorough knowledge of the laws of vegetable anatomy and physiology. I do not wish to dictate to you the process of experiment and investigation in this field; yet you will pardon me if I refer to one or two of the laws which underlie the whole process, which if

lost sight of our labors will prove unsatisfactory. I allude especially to the fixed law of the hereditary transmission of diseases, and so-called "constitutional biases." While the observance of this law is regarded as of the utmost importance in the raising of animals; yet it is either repudiated, or almost entirely discarded by a large proportion of the propagators of trees and plants. Yet this law is universal in its application, and inflexible in its nature, in the vegetable as well as the animal kingdom. It is well to know how to treat trees of feeble or diseased constitution; yet it is far better to learn the art of propagating such as shall inherit no taint or predisposition to disease. In our experiments in this direction, we meet a common, though not a universal law of a tendency to a loss of constitutional vigor, or a deterioration of the powers of endurance and reproduction in the tree or plant. This tendency commonly exhibits itself by the abuse of vitality in the seeds, and often seems to be in direct ratio to the improvement made in the quality of the fruit, or the beauty of the flower. Hence, the importance of guarding against propagating from either seed, buds, or cuttings from feeble, tender, or diseased trees, shrubs, or plants.

At present these experiments must, of course, be the work of personal skill and enterprise. In our associated capacity we can recommend plans and systems of experimenting; and yet it is for each one of us to carry those plans into our individual practice; and soon we may contemplate the happy results of our efforts in our own vast prairie State, adorned with beautiful groves, with orchards laden with the most delicious fruits; rural homes surrounded with those embellishments which indicate refinement and skill; the whole combining to fulfill its manifest destiny, as the "Great central fruit garden of the world."

Perhaps my hearers may think that I am somewhat extravagant in this assertion, and that I am a visionary enthusiast; but we have all the evidences that enlightened intelligences can require, that these statements are not in the least exaggerated; and more, I firmly believe, that the supreme intelligence who created the world, with its continents and oceans, with its mountains, lakes, and river, its prairies and forests, its luscious fruits and beautiful flowers, and all that is noble, grand and lovely, created this beautiful country of ours for this special purpose. I believe the infinite God contemplated this result and employed those mighty agencies that modern geology reveals to us, that have been in operation from the foundation of the world to the present time, long before the creation of man and during a decade of ages so inconceivably great that the mind of man conceives not of their magnitude. These agencies have been in operation, creating those geological formations that make our country so eminently superior to all others in her fruit capacity. And I believe that we receive this rich heritage fresh from the hands of the Divine Giver, that the work is just sufficiently completed, that man for whom it was created may take possession and commence his labors.

Around the habitation of Adam the Almighty planted the evergreen trees of life and the trees that bore the fruit of knowledge. Thus we see fruit trees and their associations are intimately connected with our origin and linked with our intellectual and spiritual life. The earliest record of history bears evidence of fruit being almost inseparably connected with the needs and wants of the human system. As we follow the historian's pen down the march of ages, we find every nation is an advocate of fruit, in times of peace and times of war, grasping the elements of its life to save it amid the wreck of nations, that they may enjoy their luxury in their exile. Everywhere we find fruit and its associations, and everywhere used for the most beautiful illustrations of life. It is within the means of all, "God's richest temporal blessing to man."

It is indeed a pleasure to watch the growing trees that our hands have planted, trained and cultivated, to behold the unfolding bud, the bursting blossoms, the ripening fruit, to inhale the sweet fragrance, to admire the gorgeous pencillings on fruit and flower from nature's rich laboratory. We love to care for our beautiful trees, developing in symmetrical beauty and strength, and deem it an employment of which the Gods may well be envious. But there are conditions and certain laws that man must comply with to be successful in the pursuit of fruit growing. The extent to which ignorance, in regard to Horticultural Science, prevails among the people of the west is lamentable, indeed. Man is often unmindful and negligent of his own best interests. He may desire choice fruit; he may wish to avail himself of the pecuniary results accruing from a well cultivated orchard, and

in fond fancy picture himself at some future time the possessor of the these blessings, and he drifts along and the beginning is never made, or his desire for fruit may induce him to invest in a few trees—these he probably purchases of some villainous tree peddler, or picks up refuse stock sold at auction, these he throws in his wagon with no protection to the roots, and goes up town to transact business which detains him several hours; he gets home at last and some time during the next day succeeds in getting his trees heeled in, where they remain for the next four weeks, and at the expiration of this time he concludes that this branch of horticultural operations should be attended to; accordingly he scoops out some holes in the hard soil, crowds the roots of his trees into them and pounds down roots and soil with a fence stake to fix the tree firmly in the ground. The new-fledged orchardist turns and surveys his work with a smile of satisfaction. His work is done. Henceforth he has only to gather his fruit and take in his money.

This picture is not overdrawn. There are thousands of tree planters scattered all over the land of this description. You propose to them the utility of uniting with the Horticultural Society, where knowledge in fruit growing is disseminated; he will tell you it costs too much; can't afford it. Besides, his grandfather had an orchard back yonder and of course you can't tell him anything about fruit growing.

Some four years ago I was looking around among the farmers with a view to organizing a society in Neosho County. I met an old gentleman whom I knew to be in good circumstances, with more ready money at his command than most of us have, out in that portion of the Valley of the Neosho, and a man who contemplated planting out extensive orchards. I think I put in at least one-half hour of solid talking (which was a great effort for me) showing the advantages to be derived to fruit growers by uniting with an organization devoted to their interests. I was waxing eloquent over my subject when he interrupted me with, "Look here, mister, it is gwine to cost anything to jine this here s'ciety? cos if it is I can't jine." I explained to him that the matter of fees would be slight, compared with the benefits he would receive. "Can't jine yer, mister, if it's gwine to cost enny money." In my indignation I exclaimed to him as did Peter Cartwright to one of his church members on a certain occasion. They were enjoying a revival of religion and at one of the prayer meetings they all became considerably in earnest, as all good christian people do, sometimes, and sang this song: "I'm glad that Salvation is Free." An old, white-haired brother, becoming pretty well warmed up, sprung to his feet and shouted: "Yes, thank the Lord salvation is free, brethren and sistern, I've belonged tew the Methodist Church for more nor forty years and it never yet cost me ary red cent." Peter responded from the depths of his capacious lungs: "May the Lord have mercy on your stingy old soul."

This class of orchardists are a curse to Kansas. They know nothing of the science of fruit growing, and never will unless it is pounded into them. Of all the enemies of the orchard, he is, himself, the greatest. Orchards in Kansas will never come to anything but grief where the owner will not inform himself of Kansas fruit culture. There are a thousand evils that come upon the orchard to destroy it that the uneducated orchardist knows not how to prevent. Thousands of orchards, ranging from one hundred to thousands of trees have been planted in Southern Kansas during the last five years, and what is their history to-day? Nine-tenths of them are a shame and a disgrace to our state and to the men who planted them. Many orchards have been entirely destroyed by the ravages of insects, rabbits and stock; others are maintaining a feeble existence, but are surely dying inch by inch and the present summer, in all probability, will close the melancholy scene with most of them.

This situation is chargeable to the ignorance of the tree planter. Over all these evils man has or can have an influence. For the ravages of insects there are remedies that are easy of application. The extremes of temperature can be greatly modified by the application of artificial means; and there are no evils that our orchards are subject to, but can be prevented by a little labor and care, bestowed at the proper time. Outside of this, orchardists have to contend with unprincipled men, who roam the country seeking to impose worthless and unreliable stock upon the unwary. They will, with an oily tongue, persuade you to give an order for No. 1 stock upon some reliable nursery; these they fill with refuse stock from wherever it can be bought for the least money. There are few tree planters in Kansas but can testify to the wrongs they have suffered at the hands of

these rascally imposters. There is still another class of men still lower in the scale of human depravity, if possible, than the bogus tree peddler and should be shunned by all orchardists as they would shun the poison of the deadly upas tree. I refer to the compilers and vendors of patent tree nostrums that are claimed to be "panacea" for all the ills that trees are subject to. This incubus among tree planters approaches the inexperienced and with a glib tongue extolls the virtues of his wonderful discovery; he will tell you that the nature of its components are such that no animal or plant life can exist in its absence; that in so many months it will restore dead trees to full bearing, destroy the borers, caterpillars, leaf rollers, &c. In so many weeks, it will effectually exterminate the codling moth and in fact the whole moth family, tree spiders, rose chaffers, &c.; in so many days it will entirely annihilate "aphides" and all that kind of small fry; in three minutes it gives the hopper grass his quietus and kills rabbits instant at forty rods. As no animal life can exist in its absence, it is highly recommended to sprout new horns on old cattle; is a sure cure for broken limbs, disjunct shoulders, epizoot, chicken gaps, &c. The mode of application is by boring several inches deep with a large auger, inserting the compound and plugging up. A humbug of this character has been in operation in Southern Kansas for some time past. I took occasion to expose its absurdity through the columns of the *Parsons Sun*. The humbug is manufactured at Osage Mission and M. O. Sullivan is the proprietor. Sullivan followed this exposure of his compound with a tirade of abuse, malicious misrepresentations, low innuendoes and vile adjectives in the *Neosho County Journal*, such as forever disgrace the man who wrote it and the paper that published it. In reply I wrote to the *Sun*, giving the statements of Prof. Kedzie, State Chemist, and Prof. Riley, State Entomologist of Missouri. Both of these gentlemen pronounce Sullivan's Compound a humbug. Prof. Kedzie says it is a clumsy mixture of charcoal, crude sulphur and blue vitriol. These ingredients are practically insoluble in the plant juices; can exert no influence but as a slight antiseptic, while the mode of application is highly injurious to the tree.

But, Mr. President, I have already occupied more of your time than was my intention. I would like to speak of our advantages regarding fruit markets; dwell at greater length upon insect's injurious to young orchards; the art of pruning, cultivation, &c., but as your patience is already exhausted, I will say but a few words in conclusion to the inexperienced orchardist. In the first place, get knowledge; fruit growing is a science, an art to be acquired and requires a close study of nature's laws. The Horticultural Societies are the channels through which reliable information can be obtained. Give them your support, make application of such knowledge as you obtain that is suited to your case, be diligent and watchful, never forgetting that eternal vigilance is the price of fruit, and you will be successful.

D. B. SKEELS.

Pres't. S. E. Div'n State Hort'l Society.

Dr. DeBall—I am well pleased with this essay. Tree peddlers should be shunned, and any man selling an unreliable stock of fruit trees is deserving of severe condemnation.

J. D. Manlove—This county (Bourbon) has been most shamefully swindled by tree peddlers.

Geo. Weir—Many failures in planting are attributed to the nursery man, which are the results of bad handling and reckless planting. The trees are frequently thrown into a wagon and hauled for miles with nothing to protect the roots from a scalding sun and drying wind, and I left exposed until planted. Such treatment is enough to ruin any tree.

Skeels—Some planters are so stubborn that they will not heed the advice of experienced Kansas men. Nothing will satisfy such, but to follow the prejudices formed in other States. They must have R. I. Greenings, Baldwins, Newtons, Pippins, Fall Pippins and a long list of varieties worthless in Kansas, simply because they were the favorites in the sections where they were born; in father's orchard.

Van Deman—A man who plants in these days, a worthless variety is dull and should not be pitted. One of my neighbors intends to plant an orchard of forty acres of apples and seems determined to plant the Northern Spy. I am determined to discourage his using so unprofitable variety.

Geo. Y. Johnson—I find it difficult for the nursery man to suit planters, and I think that the apple list recommended by this society should be revised, therefore, will offer the following resolution, viz:

Resolved, That a committee of one from each Fruit District (Northern, Central and Southern) in this State, be appointed,—with power to elect its assistants—to gather information from their respective districts, concerning what varieties have generally succeeded, and what have failed, giving probable causes of failure and from the facts obtained revise the society's recommended list and report to the next annual meeting.

The resolution was adopted and time given the President, by his request, to select the committee.

The meeting adjourned.

WEDNESDAY EVENING.

The Society was called to order by the Vice-President, Robert Milliken.

Exercise opened with prayer by Rev. Porter, followed with vocal and instrumental music by Col. and Mrs. McKinnie of the city.

Gen. Blair was then introduced, and delivered, in behalf of the citizens of Ft. Scott, an address of welcome to the members of the Society from abroad, and said:

"Horticulture was the first employment of man. There was a time when Kings and Nobles, and wealthy persons were the only patrons of the great and beautiful art, for it is no less an art than an industry; but now it has found its proper place, and the people have become the patrons of Horticulture."

The production of horticulture requires the leadership of an organization composed of patient, persevering men, who are content to labor for years to accomplish the laudable purpose for which you, gentlemen, are here assembled, that of disseminating information among your fellow men on so important a subject, and awakening an interest in it. Nothing that has ever been done has been of so much benefit to Kansas in attracting attention to her resources and capabilities, as the displays of her productions at the State Fairs and other Fairs and Expositions in other States, and we remember with pride, that under the judicious supervision of our leading Horticulturists, Kansas has more than once taken the highest premiums on her displays of fruit, in direct competition with the oldest and most celebrated fruit growing States.

At the present time we are passing through a season of great discouragement, but these discouragements will not always last. Sixteen years of experience in Kansas assures me that we will again have better times, and that here, eventually, persevering and intelligent labor will be rewarded with abundant harvests. The present condition is only temporary, and if we will be diligent in our work, and trust a kind and over-ruling providence, all will yet go well with us."

He concluded with a few beautiful thoughts, and as beautifully expressed, on the effect of horticultural employment on the mental and moral nature of men. Those most noted for the purity of their lives, generosity of purpose, and elevation of thought, have loved and practiced this art. Living among that which was pure, they became pure, and it is only by the cultivation of that which is good and pure that we, as individuals, or as a State or Nation, can become good and pure, or truly great, for goodness alone is true greatness. To encourage this, is the high mission of Horticulturists.

J. D. Manlove, in behalf of the Bourbon County Horticultural Society, offered words of welcome.

The response, in behalf of the State Society, was made by Geo. Y. Johnson, who said that he was no speech maker, but was known as a worker in behalf of Horticulture. In behalf of the State Horticultural Society he thanked Gen. Blair, Mr. Manlove, and the citizens of Ft. Scott, for

the kind welcome extended. He alluded to the remark of Gen. Blair, that "Horticulture was an elevating art." "he had been fully impressed with the truthfulness of this saying that day, for looking toward the Sun he had seen their horticultural products elevated and wafted upon the transparent wings of the Grasshopper, and he expected to find, on his return home, the results of his horticultural labors similarly elevated.

Again, he would offer thanks for the words of encouragement spoken. After an entertainment of music, President Gale delivered the following semi-annual address:

SEMI-ANNUAL ADDRESS.

Ladies and gentlemen of the State Horticultural Society:—We have, in the history of the past and the present, the pledge of the future. This beautiful city, with its hum of business and suburban homes, is not the creation of chance, but is the outgrowth of valuable resources, backed by a personal vim on the part of its business men, that will make, in years to come, a proud home of Ft. Scott. If so much has already been done, what may we not expect in future years. So, this Society, which I have the honor to address to-day, is not the creation of chance, or of some fancy horticulturists, but really the outgrowth of our horticultural resources, in the hands of practical men, who knew for what they worked; they had faith in Kansas, and they have shown their faith by their works. Our State has already stood forth proudly by the side of her sister States, in the exhibition of her fruits. If results so honorable have been attained thus early in our history, what may we not expect in years to come?

We gather here to-day, many of us at the sacrifice of pressing engagements at home, to consider matters that intensely concern not simply a few horticulturists, but the entire State. It is the immediate object of this Society, to deepen and widen the prevailing interest in horticultural pursuits, by awakening inquiry, and disseminating such practical knowledge as has been gathered by real workers. We need not only ourselves to understand the extent and nature of the field which this Society should occupy but we should seek to make others comprehend the same. While there are a few who have been for years alive to the fact that this Society has been doing a noble work in the State, the great mass for whom this organization labors, have not, and do not yet, recognize the intrinsic value of our efforts.

It is possible that this want of recognition is due in part to ourselves. Perhaps some of our friends in other States will not take us to be a remarkably modest Society, as we have appeared by their side in the great fruit exhibitions of the past few years, but we can never be justly charged with having at any time crowded ourselves upon the notice of our own people. We have been ready, at the first call, to act, in the interest of our State, abroad. We have willingly put ourselves virtually in the shape of a great advertising show-bill, at Richmond and Philadelphia, at New York and Boston, and Newark, and New York again. In this way we have done some very successful advertising. Our cards have been the longest, and executed in the most attractive style and colors. They have drawn better than any bills which our sister States have been able to post in the market. They have paid the printer, that is the State, by the influx of thousands of emigrants. Our Society has occupied a place no unlike that of a Hotel runner. We have been standing by on delegate, on the corners of the streets, at the wharf, and at the depot, crying aloud, and spang not, saying to every passer, "take a card for our hotel, (i. e. Kansas.) the best in the land, clean beds, well aired rooms, everything in first-class style and at the lowest charges,—let me take your baggage?" We have been wonderfully successful in securing our guests, but not quite so successful in keeping up a good table during the past winter. Now it is time to quit this business—never our legitimate one—there is a vastly more important work for the Kansas State Horticultural Society to do than this, we can afford to leave the advertising business to other hands, our work is to aid the people of Kansas in the development of our material interests, to increase the amount, to improve the quality, and lessen the cost of all horticultural products, to modify climatic conditions, to beautify the homes of the people, to gladden and brighten the lives of the toiling masses, in short, to make man wiser and better.

FRUIT CULTURE.

For an obvious reason fruit culture has occupied a prominent place in all our discussions. In a new country like ours there has been, and to a large degree still is, a necessity for this which would not be demanded in an older State. We are in respect to all fruits, treading upon new ground and our work on every hand is experimental; a few questions are settled, but we are pressed on every hand with unanswered inquiries. We have learned that some varieties of fruit will fail, we know that others do well, but the very best fruit for Kansas soil and climate cannot yet, perhaps, be named.

Careful observers must accept the conclusion that the fruit interest of Kansas is destined to take a high place. Some, it is true, are doubting now, doubting more than they will a few years hence, when the depression of the truly exceptional year, 1874, has passed away, as it surely will. There has been, and there will be for years to come, many marked failures; this is the order of nature, it is true in Kansas, it is true everywhere else. Ignorance, carelessness, and sluggishness will fail in fruit culture, always. This is right, labor and care ought always to have their reward. If fruit grew without care, it would have little market value; there would be no incentive to improve upon the ordinary productions of nature. If the return secured for our investment of time and money is a fair one, we have no reason to complain; we ought not to expect extravagant returns from small

investments; the days for such things are passed, and we are to look now for the rewards of patient and earnest toil; the production of fruit is no exception to this rule.

It is too early in our history to measure the extent of our fruit interest. Very few of our orchards have reached the bearing period, with the exception of those in a few of our eastern counties. Enough has already been accomplished to give positive pledge that the interest in a few years will be counted by millions. One hundred and fifty-eight acres of orchard has been reported as yielding an average return of \$42.40 per acre in 1874. When we remember that this is the report of the disastrous year 1874, and that a very large part of these orchards were made up of young trees which could scarcely give any returns, it will be easy to see that immense sums will be realized in a few years, from the thousands of acres already planted in Kansas. Michigan is, without doubt, one of the favored fruit regions of the country. That State gives, from the official returns of the past year, 237,061 acres of orchards. The yield of fruit from these orchards, including apples, peaches, pears, plums, and cherries, in 1873, was 6,061,176 bushels or an average of about twenty-five and a half bushels to the acre. The imperfect returns, already received, assure us that Kansas will be able to make a better report than this.

Closely allied to the fruit interest of this State, and coming within the sphere of our work, is

FOREST CULTURE.

There is, perhaps, no region upon the western continent, where forestry can more legitimately take a prominent place, than here. We need not concern ourselves with the estimate which the people of Europe set upon forest culture, that is well known, and the time will come when the same intelligent appreciation will characterize the people of this vast region. We may attempt to ignore this forest question, but experience, both in the old world and the new, as well as the sure deductions of science, will force it back upon us. The longer we live on these plains, the more thoroughly we study our climatic conditions, and the more intimately we acquaint ourselves with the laws that govern atmospheric motion and moisture, the more all prevailing and abiding will be our convictions in regard to the necessity of forest culture, upon a scale commensurate with the extent and wants of the State.

It is a question worthy the mature consideration of this society, whether it does not come within your province as a Society, to mature and present to the State

A SYSTEM OF FORESTRY.

suitable to the wants of the vast region to the west of us. Systems of forestry have long been in operation in the old world, with the best of results. These systems are the product of European institutions, and cannot be transplanted to the western continent. If we are ever to have a system of forestry, it must be an outgrowth of our republican institutions.

Also, systems of protection should be devised, suited to the peculiar conditions of our climate, and means considered by which these systems can be effectually carried forward. We must accept the fact that there are great difficulties in the way of any national movements in forestry, but it is probable that these are not insurmountable. Something has been done, more must be done, for the wealth and glory of three-fourths of the area of Kansas is involved in this question, and the results will be counted in millions of treasure. Instead of being a question for a few enthusiasts to discuss, it is one demanding the considerations of the advanced statesman; and concerning not merely the State of Kansas, but our national domain. Forest laws have so far affected very little; it is to be questioned whether they have not so far really cost the people more than will ever be realized from them. Wise enactments, without intelligence on the part of the people, will be useless. It is very much to be regretted that there is so great a lack of knowledge in regard to practical forest culture. Large sums have already been expended in useless plantings. Under our present system this wasting process will go on. It takes no prophet's eye to see that thousands of timber claims in Kansas will be failures, involving serious loss of time and money.

Practical knowledge, to a large extent, is yet to be acquired on this question. A few facts have been collected, but very much remains to be learned in regard to what is essential to successful forest culture upon the plains.

It is doubtful whether we have given that prominence to the

VEGETABLE GARDEN

in our discussions and exhibitions, which its real importance demands. We frequently forget how thoroughly the vegetable garden is associated with the profits of the farm and the enjoyments of home. Market gardening, about our cities and large towns, will always be a profitable employment and one which should receive special consideration in the transactions of our Society. Those who have given time to this business know that it is not an easy employment and yet thousands enter upon it with the idea that anyone can be a gardener. Success here is always the result of hard work, careful instruction, and slowly acquired experience. Comparatively few persons pursue this employment until they make it an eminent success. All honor to such, for the production of well grown vegetables is a matter of the gravest moment to our cities and towns. An important sanitary question is involved here, namely: whether our vegetables shall come fresh from the gardens in our immediate vicinity, or be imported from distant portions of the country with the process of decay already begun.

As horticulturists we have also special interest in the home or family garden. This cannot occupy too high a place in our minds, as involving questions of personal health and comfort. To promote this interest, exhibitions of vegetables, both growing and matured might be more specially encouraged at all our meetings.

[To be Continued.]

Agriculture.

SUGAR BEETS FOR STOCK.

Most farmers who grow roots choose turnips or rutabagas as being most easily grown and most certain to produce a crop. But always toward spring they wish that part of their turnips were changed to beets, enough at least to feed the cows after calving until grass is advanced sufficiently to pasture. For sheep or fattening cattle, rutabagas are as good a root as need be, for their principal objection is that they impart a bad flavor to the milk and butter. Even here beets and mangel wurzels are preferable because they keep sound later in the spring, while turnips fall when they are most needed. Some farmers grow a few turnips among their corn for early use, and follow with sugar beets and mangel wurzel. Beets and wurzels are readily eaten by hogs, and are an economical food for those kept in store condition through the winter. If cattle are corn-fed, store hogs will get enough grain from their droppings if left to run in the barn-yard during the winter, and very little will be wasted. Feeding cattle with corn, and letting hogs work among the droppings is extensively practiced at the west. With some roots to fill out, this plan would be nearly as economical as grinding the corn into meal.

Mr. William Otis, late president of the Western New York Agricultural Society, has for several years practiced growing sugar beets for cows. He resides near the city of Rochester, and supplies milk to a great many dealers, for which he finds his beets admirably adapted. The beets do not make a rich milk, but they increase the quantity more than any other feed which he has tried. With a few cows some corn meal has to be added to keep up the flesh, but most thrive well on beets and corn-stalks, or clover hay, without other food. His method of growing beets is to drill in by the acre rows three feet apart about the 1st of June. The land need not be very rich. All Mr. Otis' farm is fertile enough for a beet crop with no more manure than would be given for corn. Excepting one hand-weeding while the beets are small, all the cultivation is done by horse power. The cultivator is kept going through the rows once a week until September, and every vestige of weeds is cleaned out. There is no better mode of cleansing land that is foul with weeds than by a well-tended root crop, and the soil is left fertile enough after a crop of beets to grow anything else that may be wanted. A clover sod is preferred for beets, but a rich stubble will answer.

As to varieties, the mangold will yield more weight per acre than the sugar beet; but the latter is so much richer and better feed that I prefer it for ordinary planting. Lane's improved sugar beet grows nearly as heavy as the mangold, and is much the best for most uses. It is remarkably smooth, free from fibrous roots, and grows one-third to one-half out of ground, making it easier gathering. Mr. Vick objects to Lane's sugar beet that it lacks sweetness. It is almost as presumptuous to differ from Mr. Vick on horticulture as to object to St. Paul on a theological point, but some of the best farmers in this county recommend Lane's sugar beet as superior in quality as well as in size, and my own observation confirms this view. How much sugar it might show by analysis I do not know, but it is scarcely sweet enough for ordinary purposes. —N. Y. Times.

DAIRYING.

BY D. Z. EVANS, JR.

One of the most essential points in dairying, and one upon which, in a great measure hinges success or failure is

FEEDING AND FOOD.

No matter how valuable the animals may be for dairy purposes or how much they may cost a dairyman, if they are not fed liberally, and with good, wholesome, nutritive food at regular intervals, their merits will soon commence to retrograde, and they will, before many weeks, soon be on a par with the common herds of the careless dairyman or farmer. Very much should and could be written upon this highly important subject, food and feeding, but the narrow confines of a magazine article compel me to desist from going into minute details at present.

To know how to feed animals is really an art, and must be learned by quite an experience, seconded by minute and careful observation and experiment. It is very easy to throw enough food into the manger or trough for the animal's wants, but to feed economically and at the same time not only keep the animal in good flesh and health, but to increase her dairy capacity is quite another thing. Now, some animals require more food than others to bring them up to their greatest capacity and to keep them there; and, such being the case, a dairyman should carefully study his different animals. There is as much difference in the disposition, habits, (generally speaking) constitutions and capabilities of animals, as there is in man, and in the feeding and management of animals, dairy stock especially. Due regard should be had for this well defined individuality, if individuality it might be called.

Regularity and cleanliness should mark all the arrangement and management of the dairy, both in the milk house and creamery as well as at the stables. A certain time should be fixed for feeding, and *always* have it done on time, for it is a well known fact that animals will thrive much better on the same amount of food, with regularity in feeding, than by pursuing a different course. Those who doubt this, should try it for a week or two and carefully note the results.

It is a practice with most of our good dairymen to feed summer as well as winter, besides the grass which the summer affords. Natural green grass is by far the best to pasture cattle on, more especially butter dairy stock, for other grass is generally rank and more or less impairs the quality of the butter. One of the very best dairymen in the far-famed Chester Co., Pa., who owns some seventy-five or eighty fine animals, pastures on a large field or a couple of them, which have been in grass some twenty or more years. It produces earlier grass than the regularly seeded fields, and also affords good picking later in the season. Perhaps this may be new to some of our butter dairymen. A personal friend of mine, who has one of the best, if not the very best conducted dairy farms in Pennsylvania, gives me the following as his methods, in part and in brief. As they may be of especial interest and value just here, I give them:

"One of the requisites in dairying is uniform good treatment of the cows, always using them quietly and gently, with no abuse or running of them being allowed. Perfect cleanliness in all the details and a due regard for thorough ventilation in the stables should and must be observed. Neither in the yards

or stables, or in the pastures should dead animals, pools of stagnant water or filth of any kind whatever be permitted. Plenty of shade and an adequate supply of fresh, pure spring water must be afforded during the warm summer weather, while, in winter avoid letting the animals out of the stables or warm yards, very long at a time in severe weather."

"During the summer I find the best pasture to be plenty of natural green grass and white clover. After harvest we let the animals run on the fields also, that have been mown."

"In addition to grass, we give them about three quarts of wheat bran, each, daily. In winter we cut pretty much all the feed, using a S. S. S. masticator. The proportion of cut feed is one-third corn fodder and two-thirds early cut hay, clover as much as possible. One bushel of cut stuff and four quarts of meal is the usual allowance for each cow. It is put into a large mixing trough and well mixed, and then wet with boiling hot water, done about six hours before feeding. When the water is put on, the box lid is closed down until it all becomes warm and mellow before it is put out."

The meal in winter is composed of one-third wheat bran and two-thirds corn meal. The above is the average feed for each cow, some of the cows get too fat for profitable dairy purposes on it. Some heavy milking and lean fleshed ones we give some additional meal."

We have cows that make nine and ten pounds of butter each, per week, but in a dairy of some fifty or more milking cows, some stripping and others nearly dry, our average is rather less. We do not aim so much at large quantities as at superior quality."

The gentleman above mentioned has a most magnificent herd of thoroughbred Jersey and Guernsey cows and their grades, with a few Short-horn Durhams, the bull, "Sir Champion the Younger," standing at the head of the herd. He is a Guernsey bull, imported from E. P. Fowler, Parish of St. Andrews, Island of Guernsey. He could not be bought for \$2000. The H. R. Jersey bull "Bertrand" sires his Jersey calves. He is of the Sharpless stock, Mr. Sharpless being the owner of the renowned Jersey cow "Duchess," imported.

The quality of the butter produced by my friend, is very superior, it now being brought in successful competition with the "Ogden Farm" butter and other high class brands of butter which sell so readily for one dollar per pound. But all this is not the result of chance or fortune, but has been brought about by a regular systematized management, even by the smallest particular. Every department moves along as smoothly as a piece of perfect and well oiled machinery, while a scrupulous regard for cleanliness is observed everywhere. I have visited his place several times and have always found something new and well worth knowing every visit I made.

This perfection was accomplished by a dint of care, perseverance for several years, he having been engaged in dairying for some twelve or thirteen years. For some time his butter commanded, wholesale, fifty cents, net, per pound in summer and sixty-five cents, net, in winter, the purchaser taking every pound he could make at these prices. Now, so extra has been the quality of his butter, uniformly, he gets much more, proving that it pays well to produce a good brand of anything and not only prevent deterioration but to endeavor to improve. Sooner or later, customers find out what brand to buy and stick to, and success cannot help but crown the endeavors of the persistent, painstaking and honest dairyman. —Farmer's Journal.

Educational.

EDITED BY PROF. J. B. HOLBROOK.

THE ENGLISH LANGUAGE.

BY PROF. HAY, CONCLUDED.

VI.

In our last we illustrated the progress of the English Language through the Semi Saxon and Old English periods, and we purpose now to give a few specimens that shall carry us down to the ablest writers of modern English.

Geoffrey Chaucer is deservedly ranked highest among the fathers of our tongue, for the *Canterbury Tales*, of which he was the author place him high among the poets of all ages. Quite a number of ballads and metrical romances were said and sung in the age immediately preceding Chaucer, but our space precludes any notice of them, but the "Vision of Piers Plowman," written by Robert Langland, is considered to be superior to Chaucer in the purity of its English. It also restores the old Saxon alliterations. It is valuable as an expose of the political side of the religious changes that were then taking place, and which distinctly foreshadowed the Reformation. We give a few lines indicating the state of the religious orders and containing almost a prediction. (Cir. 1350.)

"Little had lords to done to give land from her (their) heirs,
To religions, that have no ruth, though it rain on her alters.

In many places there be parsons by himself at ease,

Of the poor they have no pity, and that is her charity!
And they leiten hem as lords, her lands lie so broad.

Ac, there shall come a king and confess you, Religions,

And beat you as the Bible telleth, for breaking of your rule,
And amend moniales, (nuns,) monks and canons,

And put hem to her penance."

Wycliffe, whose writing we have already illustrated, was contemporary with Langland and Chaucer, and the labors of this trio went to the same end, a religious and political revolution and the formation of our language. In 1302 pleadings in English, were first used at the bar and parliamentary proceedings began to be written in the same tongue in 1388, and not long after Chaucer's death which took place in 1400, acts of parliament were drawn in the language he had ennobled. Chaucer

was a politician and was connected by marriage with John of Gaunt. Time honoured Lancaster, and he experienced the vicissitudes of that nobleman's fortunes. He wrote both in prose and verse, his *Canterbury Tales* being his best known work. These *Tales* are said to be told by the various personages who started together from the Tabard Hotel, London, to make the pilgrimage to the shrine of Thomas A. Becket, at Canterbury. The word *Canter*, is said to be derived from this period being the pace horses were taught to use on the way to Canterbury. Chaucer writing English ridicules the barbarous French spoken by some of his pilgrims. Of one he says:

French he spake, fulle faire and fetisly,
After the schole of Stratford atte Bowe,
For French of Paris was to hyre unknowne.

From the *Tale of the Prioress* we give a few lines with which we close our notice of "Dan Chaucer."

A little schole of christian folk there stood,
Down at the farther end in which there were
Children, a heape comen of christian blood,
That learned in that schoole, year by year,
Such manner, doctrine, as men need there,
This is to say, to singen and to read,
As small children do in their childhede.

In this passage there are three words, (school, manner, doctrine,) that are of Norman French origin, and the proportion of words of similar origin is not much different in authors of modern times.

Of Sir John Gower, and the Scotch poets, Barbour, and Blind Harry who were writers of the 14th Century, we must say nothing, and we shall not take our illustrations always from the best known names of succeeding centuries, and only remark that the dialects of different parts of England account in many for the diversity of spelling and pronunciation that we find, and that these dialects still exist and serve to illustrate the forms of English that were the best speech centuries ago.

In the year after Chaucer's death an alliterated poem appeared attacking the friars in the manner of Pierce Plowman. It bore the assumed name of Jack Uplande. A priest replied to it and Jack rejoined. Speaking of himself as unlearned, he says he could not tell

Great A from a windmill,
Nor B from a boule-foot,

which is a proverbial exaggeration of ignorance still in use. Here are five lines that indicate Jack's style.

Saint Paule says that all our deeds
Should be do in charitie,
And els it is nought worth
But displeasing to God,
And harme to oure soules.

In 1436 a politico commercial pamphlet was published under the title of the "Libel (little book) of English Policie," from which we take the following lines:

Moreover of Scotlonde the commodities,
Ar felles, hydes and of woole the fleeces,
And alle thesres must passe by us aweye,
Into Flaunders by Englonde sothe to save.

Harding, a gentleman of the time of Henry, wrote a rhyming chronicle or history about A. D. 1465, from which the following lines are taken. They refer to Wallace, the hero of Scotland:

He slew the judge and the chancelor,
Th' officers also and the chamberlayn,
The capytaynes and the tresorer,
And gatte the land from Englyshmen awaye,
And slewe them all with cruell death and payn.

The first printing press was set up in England by William Caxton, in 1477, and it was Caxton's craft that did more than the abilities of all the writers of that or other ages to settle our language. The first book printed in the chapel at Westminster by Caxton, was "The game and playe of chesse," and other books soon followed. Then came Sir Thomas More and his daughter Margaret. Tyndal and the other translators of the Bible, and their books were printed. Classical learning was revived, and Cardinal Wolsey established professorship of Greek at Oxford. Skelton and Roy had literary abilities of no mean order, and they were no friends of the cardinal. Roy had assisted Tyndal in his translation, and when by order of the bishops, it was consigned publicly to the flames, he thus wrote:

O! paynted pasture of Satan, the prophet,
Ragynge course wrapped in a wolves skynne,
O! butcherly bishop to be a rylle unmete,
Maker of misery, occasion of synne,
God graunt the grace now to begynne,
Of thy dampnable dedes to be penitent,
Brennyng Goddis worde the wholly testament.

That age was known as the period of the revival of learning and intercourse with Italy and classical studies combined to make the excellence of the English Language in the sixteenth century. There were many learned ladies as Margaret Roper, Jane Grey, Queen Elizabeth and the Tutor of the two last. Roger Ascham contributed to the formation of a standard of speech. Towards the end of the century, certain writers gave an affected style to their compositions, which are called *euphuistic*. In one of Scott's *Tales* this style is illustrated in the person of Sir Piercy Shafton, but these writers had small influence compared with Philip Sydney, Walter Raleigh, Edmund Spenser, William Shakespeare, who brought the century to a close with a galaxy of glory.

The seventeenth century was as fruitful of great names connected with the use of the English language as any age before or since. In prose and poetry this is alike true, and the



Literary and Domestic.

EDITED BY MRS. M. W. HUDSON.

BACK YARDS.

Front yards are like company manners, and are not a very reliable index to the character of the inmates of the house to which they belong; but a back door yard tells pretty plainly how much its keepers think of their surroundings, when removed from the view of others. If it is overgrown with weeds and littered with old boards, promiscuous wood piles, beds of chips which have been accumulating for years, old ash hoppers, hoopless tubs, legless chairs, old iron, tin caps, worn out implements, rags and filth, one feels pretty confident that the same plan is followed indoors, and that the front room is about the only decent apartment.

Most people see more of their back yards than they do of the front: why should they not present just as neat an appearance, and be made as pleasant and attractive with shade and flowers and grass and good walks? There is usually some attempt made at cleaning up all back yards in the spring; but plenty of people don't seem to know how to go about it, nor how long to keep on.

It would be a good deal easier to tell how to make a new yard, but as that is not what we set out to do; we will only say to the lord of the manor, please don't plow up the prairie sod on your door yard, unless you are able to smooth it nicely and seed it well with blue grass, and make the blue grass grow, for nothing will make a pretty, nor a tidy yard if it has not a good sod.

No amount of trees, shrubbery and flowers will compensate for the lack of green grass; no house can be kept clean unless a mat of turf surrounds it, and that, we insist, must be the first consideration, both for comfort and appearance in any yard, but if the yard has once been in grass and it is now half covered with trash and rubbish; do give it a good cleaning up and the grass will very soon spread and grow again.

Begin at the wood pile, and if it is so near the house as to make the whole yard unsightly, remove it entirely to some more suitable place, or if it has been for a number of years in the same spot, it will pay to remove for several reasons,—the proximity of such a bed of decaying vegetable matter is very unwholesome. If the larger chips are raked out, several wagon loads of excellent manure will be found beneath them.

If old boards, tumble down sheds and pens, useless fences, shingles, barrels and such combustible matter encumber your premises, collect them into a pile, and use them for kindling. Carry the old ashes, bones and rags to the compost heap, and make it out of sight of the house if possible. If you can have a pit where there is no danger of the babies falling into it, have one if you can get it, and put there all the old tinware worn out stove pipes, broken crockery and glassware, there is no nicer way to get rid of such things than to bury them. Don't let me beg of you, keep the swill barrel where you can deposit things into it without stepping off the piazza, or out of the kitchen door. You had much better have the pigs there and let them eat up scraps as fast as they are carried out; and don't put everything into that barrel, for instance vegetable tops and apple and potato parings, such things should be thrown to the pigs immediately; because pigs will eat swill, it does not follow that all their food should be made as disgusting and unhealthy as possible. Let us repeat then, keep this barrel at a respectable distance; see that it is emptied every day or two, and occasionally scrub it out with an old broom and the washing suds, a boy or man can do this as well as a woman, where mothers and sisters are scarce, and hired men and good boys plenty. With this nuisance removed from under our nostrils, and a swarm of flies with it, we might get a breath of pure air in the back yard if we only had a drain, and almost any amount of hard work, persuasion, or strategy is allowable and advisable in order to secure one that will carry away from the house and the well and the cellar and out of the yard, the hundreds of gallons of dirty water that are thrown out of every house in the year. Take out the weeds, rake and sweep the whole yard, and give the grass a chance to grow, and you will soon have, not only a decent, but a beautiful yard. The more you can ornament it with trees and shrubs, vines and flowers the better, so that you don't kill the grass, nor enough of it to destroy the effect of a green plant about the house; but if you cannot ornament it all, it will look clean and inviting, while a rubbish patch is always slovenly and repulsive.

ANOTHER DOG STORY.

M. STRATTON BEERS.

It was a great black dog, wet and bedraggled with mud and water, and shivering with cold; it sat, snug up in the corner of the porch looking the picture of desolation and woe, of utter hopelessness and despair; a perfect emblem of wretchedness and hunger, of want and misery.

This was what Uriah Glick made out, as he hesitated, with one foot on the lower step leading up on to the porch, and peered through the mist of the gray morning, whose light was still dim and uncertain, and lent him but feeble assistance in his endeavor to make out the dark figure in the corner. He had just come in from his faithful watch back and forth, to and fro, before the great

building of Smallwood, Odgen & Co.'s dry goods store, for he was what they call a "night watch," and, night after night, he kept up his ceaseless vigil in front of the shadowy old pile of granite and mortar; faithful to his employers' interests, and then went home in the early morning to sleep until he felt himself refreshed.

Uriah Glick was afraid of dogs; had always been afraid of them since he could remember, and long before that, as his mother could have testified, had she been sworn by the court. In fact, the only real terror that he ever encountered on his night watches was when some stray dog, lost by his master, would come sneaking toward him, in the vain hope of finding a friend; and now Uriah stood looking at the huge animal on his own porch, with a feeling of indecision as to whether it was best to go round the house and enter the back door, or to put an end to what evidently was a most miserable existence, at the best, with the fine silver plated revolver, on which his hand had rested from the moment the shrinking figure had caught his attention.

The dog whined. It was a whine that excited pity in Uriah's heart. When he held up one of his fore paws, and the light which was growing stronger every moment, showed the man that blood was trickling from it to the floor; that there was tracks of blood all over the porch floor.

"Poor fellow! I'll not kill you, I'll go round to the kitchen and wake the little woman to let me in."

He rapped on the door with his cane, or club it was rather, so short and heavy and lead loaded; then waited to hear the quick stepping of his wife as she came down the stairs to the well-known rattle of her husband.

"Why, Uriah! What made you come to this door, did you forget your key? Gracious! where did you find that monster of a dog?"

Uriah sprang into the kitchen, and would have shut the door, in the fright that came over him at the glimpse he caught of the limping animal which had followed him round to the kitchen door so noiselessly that he had not noticed him, had it not been that Hettie, his wife, not sharing the inborn fear of dogs had caught sight of the bleeding foot.

"Oh! Uriah, do tell me what is the matter with him," and the sympathetic woman knelt down on the doorstep and took the huge paw in her hand.

"Don't! Hettie for God's sake don't! he may bite you. I found him on the porch, and came round here because I was afraid to pass him: he's some stray brute—"

"Oh! look here! there is a great cut and a place—yes! a piece of thick glass in it. Do take it out Uriah."

The dog was licking Hettie's hand and his bleeding foot by turns, and whining half to express the pain in his foot, and half the gratitude he felt for the sympathy shown him.

"Ah! kick that dog, out Hettie. I can't take the glass out; besides if we do, he'll hang round here until I shall have to kill him to get rid of him; blast the whole race of dogs any way, I wish they were all sunk in the bottom of the Dead Sea. I won't harbor one of the nuisances about my place for an hour."

It was a half howl the dog made now, and the look in his great brown eyes as he turned them full toward Uriah Glick, looked more human than canine, and awakened in Uriah's heart a feeling toward one dog in particular, and before his words had fairly passed out of his mouth, he had forgotten he had even thought them, and he found himself endeavoring, in his kindest, tenderest way, to extract the piece of glass which still remained in the dog's foot.

In a trice the glass lay out on the ground, and Hettie had spread a rug in one corner of the kitchen, and escorted the "poor dear old fellow" to it, in her most enticing and hospitable manner; then she had kept Uriah all alone with him, while she ran up stairs for her bottle of Arnica; some of the latter she poured on a cloth, and then carefully wrapped the wounded foot.

It took the buxom, cheery little Madame Glick longer than usual that morning to get the ham fried and the omelet made, with the odoriferous coffee and bit of grated turnip for a relish; for ever and anon she was obliged to stop and pat the great black head and express her sympathy for his suffering with many a tender caressing word, which are always abundant in the vocabulary of a tender hearted woman. Then her hands would require a washing before she could return to her breakfast getting; thus it was, that over an hour had passed before the meal was ready, and Uriah began to get fidgety; his night walks gave him a grand appetite always for his breakfasts; and noticing that it was the dog that made the time so unusually long, his old aversion to all dogs in general came back and caused him to say rather impatiently:

"Hettie, don't waste any more time or sympathy on that brute. I shall empty the contents of my revolver into his body as soon as I eat my breakfast."

"No, sir! you won't; that dog is mine. I have adopted him into our home as an honorary member; haven't I, old fellow?" with a nod and smile to the dog in the corner.

"As an 'ornery' member, you mean, Hettie, what can you want of a dog?"

Just for company, Uriah; these long nights when you are gone, I'd feel so much safer. Mayn't I keep him?"

You see the breakfast was ready now, the coffee steamed out into the room so pleasantly, the omelet was turned out such a beautiful

brown; and the little woman who bent over him and left a kiss to creep thro' the mouse-tache which covered his lips, was so altogether charming, that if it had been an even dozen of dogs she had begged to keep for company, Uriah Glick would have said just what he said of the one poor fellow on the rug.

"Of course, if you really want to keep him, get him well fattened, and he will be a fine animal, if one must have a dog, I say have a nice one, and he is all of that."

After that 'Ban' was as much of a pet with Uriah as with Hettie. A few weeks sufficed to heal entirely the wound in his foot, and he soon proved that he was able to make himself useful in many ways.

Hettie Glick was a most devoted little church woman, and had always been in the habit of attending the weekly prayer meetings held in the church which stood only two squares from where they lived, and after Ban came to them, he used to accompany her thither, wait patiently in the vestibule until the meeting closed, and then walk close at her side all the way home.

One night they had been to church, and had walked over the one square and a half which lay between it and home when Ban suddenly stopped and uttered a low growl, so low that Mrs. Glick but just heard it, and then he placed himself directly before his mistress, so that she could not advance a single step. The street on which they lived was not lighted with street lamps, and it was in the dark of the moon, so that Mrs. Glick, strive as hard as she might, could not make out anything before her, and though very much frightened by the unusual manner of her old friend Ban, felt inclined to go on; and tried to push him away, but Ban caught her dress in his mouth and pulled her back the way they had just come. Growing more frightened each moment, she at length went willingly, following him from one crossing to another until they came into the lighted parts of the city, and she saw that he was leading the way to Smallwood, Odgen & Co.'s, where her husband was keeping watch.

Once arrived there and the story of Ban's singular actions told, Uriah Glick's curiosity and suspicion were at once aroused, and giving a signal common to the police, soon had the satisfaction of relating the circumstances to two of his brother officers; one of whom took his place while he with the other betook themselves to his little dwelling accompanied by Ban who seemed well pleased that his mistress remained at the station house where they stopped to recruit their forces, until they numbered four strong.

Arrived at the gate before the house, Ban again gave a low growl of warning, and then trotted along up the walk followed by the shortest man in the crowd, who had thrown a cloak over his shoulders, and looked to all appearance in the very dim light of the cloudy, moonless night like a lady. The rest crawled along behind him close to the brick of the walk.

With a brisk step the little man sprang up on the porch, tripped across it to the door, applied the key to the lock, and as he did so, felt his arms caught by some one from behind, and himself drawn swiftly aside, while another form passed quickly by them into the house.

In another instant he heard the thud of a sharp blow upon the head of the one who pinioned his arms, and felt the hold upon them instantly relax, as the man sunk to the floor.

Springing into the house, Uriah Glick heard the words "Come on Hall! you laid her out didn't you? I expected she would yell the minute you caught her arms. She'll keep quiet while we secure the chink, then let her raise thunder."

On through the dark sped the robber, as if acquainted with each foot of the house, through the little parlor and sitting room to the door that opened upon the stairway, and there a blow from Uriah Glick's club caused him to pause until his hands were securely fastened, and his belt emptied of the pistols and knife it carried. Outside on the porch similar precautions had been taken with the accomplice who soon recovered from the effects of the blow; and when Uriah had made a light, and turned its glare on the man at the stair door, he discovered in him a man wearing the blue uniform of the police and belonging to the same station with the two men who men who had joined himself and friend on the mission which had proven so pregnant with results astonishing to all; and not only this, but a man in whom he had reposed the utmost confidence, and the most unfortunate one of his having been made the unexpected heir to a windfall of several thousand dollars in gold, the hoardings of a miserly relation during years, who had recently died and left the result of his savings to his best loved relative, Uriah Glick.

And this friend; this man who was a protector of life and property, had conceived the idea of waylaying his friend's wife on her way from prayer meeting, and rendering her senseless during time sufficient for him to secure the windfall for his own and accomplice's use, which fiendish purpose would have been accomplished had it not been for the sagacity of the noble dog whom they had befriended.

It is needless to say that there was a vacancy in the police force to be filled the next day, and that Ban rose to the highest possible station of honor which a dog could fill; and that Uriah Glick's gold found lodgment in a bank instead of his bed room, from that time forth.

§1. §1. §1. §1. §1. §1. Pays for the FARMER for the balance of 1875

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 memorandum of affairs.

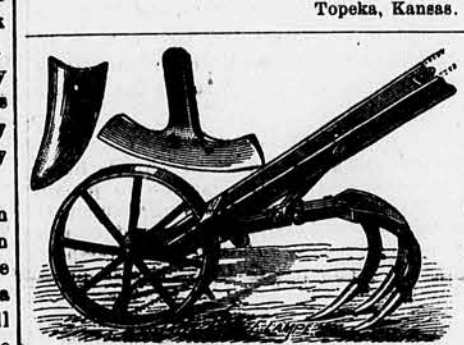
The preparation of the "Practical Farm Account and Reference Book" was suggested while the writer was engaged in farming, endeavoring to make the publications, which he was in possession of, answer the purpose of account books for the farm. The finishing of the work has been deferred from year to year, 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, inventory, register of crops, stock, etc., etc., bound in one book, finely printed and finished substantially, at a price within the reach of every farmer in the land.

The whole plan is so simple that any 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 day. 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 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. S. Shaffer, Executors; J. 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's premium, 35 cents on each \$100.....\$2 50
Total cash paid.....\$4 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 \$2000 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.....\$3 75
Total cost for three years.....\$9 00
Our rates are about one-half of the joint stock company rates, and only a small part of the premium required to be paid in cash.
Address S. H. DOWNS, Secretary, Topeka, Kan.

RUE'S PATENT
Hand Cultivator

RECEIVED THE PREMIUM AT Five State Fairs—St. Louis, Mo.; Mansfield, O.; Cleveland, O.; Erie, Pa.; Indianapolis, Ind. Has a movable beam; rakes, hoes; scrapes the sides of sweet potato ridges; cuts runners; does all that any other hand plow does. It is a wrought iron frame; steel implement. Send for circular. Address
MAJ. GEO. W. RUE, Hamilton, O.
Sample machine may be seen at W. W. Campbell & Co., Topeka, Kansas, General Agents.

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

21,000 COOK EVAPORATORS are in use, and 10,000 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 choke, 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.

NEW FORCE-FEED
Buckeye Grain-Drill

10,000 DRILLS AND SEEDERS BUILT FOR 1875. Will sow any desired quantity without change of gear. Send for Circular. It Beats them all. P. P. MAST & CO., Springfield, O.

PIERCE WELL AUGER
We guarantee that we will successfully compete with them in boring a 20-inch well, through sandstone and sandstone, and in taking up and packing sandstone and sandstone. \$25 PER DAY GUARANTEED. Send for Catalogue. Price, Address CHAS. D. PIERCE, Peru, Illinois.

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

In answering an Advertisement found in these columns you will confer a favor by stating 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. CARPENTER.
2. CABINET.
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 planes 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. S. Shaffer, Executors; J. A. Washburn, Treasurer; S. H. Downs, Secretary.

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Our rates are about one-half of the joint stock company 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,

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

GEORGE W. BROWN

Where Advertising Contracts can be made.

LET US SMILE.

Fast young ladies, like fast horses, often win by a bare neck, and yet with this difference, the horse's victory is due to space covered quickly, the young ladies' to space not covered at all.

Motto for the Arabs—Up and Be-douin. An era unknown to women—The middle ages. The bump of destructiveness—A railway collision.

"Owing to the limited proportions of the school house," reads an advertisement of a country spelling-match, "words of only three syllables will be admitted."

"I say, landlord," said a Yankee, "that's a dirty towel for a man to wipe on." Landlord, with a look of amazement, replied: "Well, sir, you're mighty particular. Sixty or seventy of my boarders have wiped on that towel this morning, and you are the first one to find fault."

Two colored men took refuge under a tree in a violent thunder storm. "Julius, can you pray?" said one. "No, Sam," was the reply; "nebber prayed in my life." "Well, can't you sing a hymn?" Just then the lightning struck a tree near by, shivering it, when the first speaker exclaimed: "See heah, honey, sumfin' 'ligious has got to be done, an' dat mighty sudden, too, s'pose you pass around de hat?"

The inconsistencies in our orthography are something fearful to contemplate. To-n-g-u-e spells "tongue," and the man who first spelled it should have been tongue. E-l-e spells "ache," and that's all you can make out of it. E-l-g-h-t spells "eight," no matter how you deprecate the idea, and that a-l-e is enough to spell "ale," and f-e-i-g-n "feign" is enough to make anybody smile, if the effort were not too painful.

A CALIFORNIA EDITORIAL.—Now, we will inform the sweet-scented evader of truth and honesty who runs the little nigger nose-rag across the street, that he cannot ram any of his infernal lies down our throat, for we know him too well to believe anything he says, even under oath.—Amador County (Cal.) Independent.

AN EDITOR'S APPEAL.—As the report that we are very wealthy has gone abroad among our subscribers, and has made them awful slow about paying up, thinking doubtless we don't want the money, we hasten to say the report of our wealth is false in every particular. If ocean steamers were selling at a cent a dozen, we couldn't make the first payment on a canoe. The lightning of poverty has struck us square, and had it not been for an armful of hay our devil managed to steal from a blind mule, our large and interesting family would be about a mouthful to eat at this moment. Is not this a sad picture, and can you delinquent subscribers look upon it without feeling the greenbacks rustle with indignation in your pocket-books? We do not like to dun you, but we must if you fail to take the hint.—Shenandoah (Va.) Democrat.

The following is told of an old lymphatic negro who had wonderfully large feet and was always ready to take a rest. One day while lying upon the cabin floor slumbering, with his feet presented to a glimmering fire, he opened one eye a little and getting a glimpse of the dark objects, he mistook them for two little negroes and cried out: "Get 'em 'fore me!" and released into sleep. After a while he opened the other eye, and still seeing the intruders, cried, "Git 'em 'fore me, I say! kick you in de fire if you don't—I will, shuah!" and again he snored. His dreams not being pleasant he finally opened both eyes, and still seeing the pests, he drew up his feet for the threatened kick, but alarmed to see the enemy advance upon him, he yelled out: "Wha-war you comin' to now? Go way dah! Ho, ho, my own two feet, shuah!"



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 Plumber's 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.



Jersey Bulls For Sale.

One five years old, the other two years old, both registered in Herd Book. For sale, cheap, apply to **CHARLES KERNY**, Watons, Kan.-as.

SHEEP.

50 head of sheep for sale. Address **CHARLES MOXLEY**, Madison, Greenwood Co. Kan.

CATALOGUES, Pamphlets, Briefs, etc., printed in the finest style, and at lowest living prices at the **KANSAS FARMER** Book and Job Printing office, Topeka, Kansas.

Farm Stock Advertisements.

SHANNON HILL STOCK FARM.

ATCHISON, KANSAS.
Thoroughbred Short-Horn Durham Cattle, of Straight Herd Book Pedigree, Bred and for sale.
Also Berkshire pigs bred from imported and premium stock, for sale singly, or in pairs not akin.
Address **GLICK & KNAPP**.

P. S. Persons desiring to visit the farm, by calling on Mr. G. W. Glick in the city of Atchison, will be conveyed to and from the farm free of charge.

HIGHLAND STOCK FARM.

BEECHER, WILL CO., ILL.,
On Chicago, Danville and Vincennes R. R., 40 miles south of Chicago; 1/2 mile from Station.

T. L. MILLER,

Importer and Breeder of Hereford Cattle and Cots-wold Sheep.

The Herefords are the best grazing cattle. They mature early and are hardy. Make the largest gain on a given amount of feed. Make large weights and good quality. My Hereford Bull, Sir Charles, weighs 2,700 pounds. Hereford Cows weigh from 1,300 to 1,800 pounds. The Cots-wold Sheep are hardy and will shear from 3 to 3 1/2 lbs.

They weigh from 150 to 200 pounds and over.

STOCK FOR SALE.
Correspondence solicited.

NORMAN HORSES



Have made the Breeding and Importing of Norman Horses a specialty for the last 30 years have now on hand and for sale 100 head of stallions and mares on terms as reasonable as the same quality of stock can be had for any where in the United States. Send for illustrated catalogue of stock.

E. DILLON & CO.

TROTTER HORSES.

Of Fashionable Breeding.
HAMBLETONIAN'S, STARS AND
Clays, etc., etc. For Sale at Prairie Dell Farm, SHAWNEE COUNTY, (near TOPEKA, KAN.)
R. I. LEE.

REPAIRS.

For Clippers, Reapers and Mowers.

Constantly on hand. Address **Buffalo PITTS Thresher & Co.,**

H. REINSTEDLER,
Wholesale Dealer in Farm Machinery,
ST. LOUIS, MO.

ATTENTION GRANGES!



The CLIMAX MOWER and REAPER.

A first-class machine in every respect, we offer to Patrons at wholesale rates. Send for Pamphlets, &c.

GIBBS & STERRET MAN'F'G CO.,
No. 5 South Main Street,
St. Louis, Mo

J. H. IRWIN, Manager.



THE THOMAS SMOOTHING HARROW.

The best harrow for pulverizing the ground.

The best harrow for preparing the soil for grass or other seeds.

The best harrow for covering seed.

The best harrow for cultivating winter wheat or in the spring—adding largely to the yield.

The best harrow for cultivating young corn or potatoes, and thoroughly destroying the weeds.

The teeth being made of solid steel and slanting backwards, and thus never clogging, do not tear up corn or potato plants, but destroy all the light-rooted weeds.

Every farmer should have it. Send for illustrated circular to the manufacturer's southwestern agents.

OLMAN & Co., St. Louis, Mo.



Requires but two horse power; and bales either hay or cotton without tramping or stopping.

Thirty bales of hay per hour. Twenty bales of cotton per hour.



Massillon Harvester
Buy the Best.
Two men bind Ten Acres daily. Binders cost \$175 or \$200. Ad-dress **EDWIN BAYLES**, Massillon, O.

Retailing Reapers at WHOLESALE PRICES.

FARMERS, send us your order with \$125 and secure one of **Selberling's EXCELSIOR MOWERS**

And Dropper Combined.
\$40 less than the REGULAR RETAIL PRICE.
Order early. **PRIOR, WHEELING, W. VA.**

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. Average temperature, summer 67° winter 33°.

Thunder storms rare, hurricanes unknown.

Death rate lower than in any other state.

Soil of unsurpassed fertility, especially suited to cereals. No failure of crops in thirty years.

Great abundance of fruit. Stock raising very profitable. 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.

Railroad facilities. Navigable rivers, including the great Columbia.

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 Au Sable, Cheboygan, Muskegon, and Manistee 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; soil, black sandy loam, and abounding in springs of the purest water. These counties are being rapidly settled, and the lumbering business in the vicinity will afford to farmers a first-rate market for produce for many years.

TERMS OF SALE.

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.

20 Per cent DISCOUNT FOR CASH IN FULL AT DATE OF PURCHASE.

For further information address,

John A. Clark,

LAND COMMISSIONER.

Fort Scott, Kan.

ADVERTISING

AND HOW AND WHERE TO DO IT.

A book of 50 pages every advertiser should have before making contracts. Sent for ten cents by

ROWE & CHESMAN

Advertising Agents,
THIRD & CHESTNUT STS., ST. LOUIS, MO.

ALEX CHARLES & CO.,

GEN. ADVERTISING AGENTS,

Cedar Rapids, Iowa.

Advertisements inserted at reduced rates in all the leading papers in America. Stock Breeders (particularly) will find it to their advantage to send for our List. Terms, etc. Our facilities excel those of any Agency west of New York City.

H. H. CHANDLER, W. S. EDEN, D. M. LORD.

H. H. CHANDLER & CO.,

NEWSPAPER

ADVERTISEMENT BROKERS,

CHICAGO, ILLINOIS.

RELIGIOUS AND AGRICULTURAL

NEWSPAPERS a specialty.

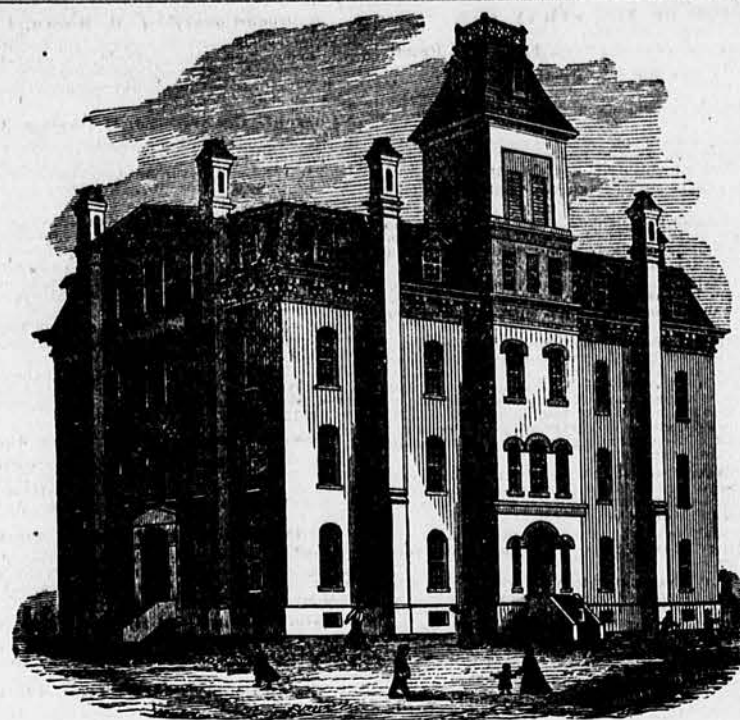
Complete files for inspection of advertisers.

47 Lists sent upon application.

47 Send for estimates.

JOB PRINTING.

EVERYTHING from a card to a double-sheet Poster executed in the finest style at THE FARMER office.



LEAVENWORTH STATE NORMAL SCHOOL, LEAVENWORTH, KANSAS.

The advantages offered at this institution cannot be excelled. The **Training and Model** school, in which Normal students observe and practice teaching, consists of 800 pupils, thoroughly graded. Tuition is free. Text books are furnished free of charge. Students can enter at any time. Eighty per cent. of the Normal students are now boarding themselves at a cost (including everything) of \$6.00 per month. Incidental fees \$1.00 per term. Three terms a year. The Fall term of the Normal School commences September 5th, 1875. Circulars sent free, on application. Write for information. **JOHN WHERRELL, President.**

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 800 acres, closely planted, and comprising a general assortment of fruit and ornamental trees, and complete assortment of 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 whole-sale Price List. **BLAIR BROTHERS,**
Proprietors Lee's Summit Nurseries,
septs-14 Lee's Summit Jackson County, Mo.

KAW VALLEY NURSERY.

10,000 Apple Trees, two and three years—line.

150,000 Two year Hedge Plants.

50,000 Apple Grafts, \$5 per 1,000.

40,000 Maple, 3 to 5 feet, \$5—5 to 8 feet, \$10 per 1000.

30,000 Budded Peaches, also 50,000 seedlings for groves or fruit, 3 to 4 feet, \$2 per 100, \$10 per 1000.

Also Pear, Cherry, Plum, Apricot, Nectarines, small fruits, ornamental trees, shrubs, evergreens, etc. Send for catalogue and price list.

EARLY CHAMPION

GRAPE

BEST Early Grape known. 2 weeks earlier than any other. Chas. Downing and F. Barry call it superior to it in both beauty and quality. Fruit large and handsome. Bunches compact; color and appearance of Concord. Vigorous grower. In-teresting bearer. \$1 each, \$10 per dozen—postpaid on receipt of price. **DONNELLY & Co., Rochester, N.Y.**

500,000 GRAPE VINES FOR SALE

CHEAPER than anywhere else. Concord—1 year, \$20 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, Karmela, Norton, Herbeumont, Catawba, Croton, Hartford and all other varieties cheaper than anywhere. Also all small Fruit Plants. Address **DA. H. SCHRODER, BLOOMINGTON ILL.**

RAILWAY PITCHING

APPARATUS

Chapman's Best Fork and Conveyor in use. Unloads and carries Hay, Grains, &c., over deep mounds, into sheds, barns, &c. Saves labor, time, money. Sent on trial. Circulars sent. Agents wanted.

G. E. Weeks & Co., Syracuse, N. Y.

Self Propelled

For Cripples

Can be easily used in or out of the house, and is the State your stamp for illustration of different models. Please mention this paper.

ling Chairs.

& Invalids, propelled, ethi-dors, by any use of hands, size, and send trated catalogue styles & prices.

S. A. SMITH,
No. 23 Platt St.,
N. Y. City.

\$200

to sell the IMPROVED "HOME SHUTTLE" SEWING MACHINE, the only practical, low-priced "Lock Stitch" Sewing Machine ever invented. Address **JOHN J. CLARK,** Pa.; Chicago, Ill.; Louisville, Ky., or St. Louis, Mo.

THE

GLOBE CHURN

Every One Using it once will use no other.

Three sizes made, holding five, seven and ten gallons.

Circulars sent free. Cash orders wanted where we have no agents.

ATTENTION, OWNERS OF HORSES.

Ask your Harness Maker for the ZINC COLLAR PAD. They are warranted to cure any sore neck on horse or mule, or money refunded, if printed directions are followed. Send 5c. for sample. Zinc Collar Pad Co., Sole Manufacturers, Buchanan, Mo.

SENT FREE

The BEVERLY BUREAU \$40 to \$75 CASH per week to all at home or traveling. Something new. Address. The Beverly Co. Chicago.

\$100 to \$200 per month guaranteed to agent everywhere, to sell our INDE-STRUTIBLE WHITE WIRE CLOTHES LINES. Sample free. Address the HUPSON WIRE MILLS, 128 Maiden Lane, N. Y., or 18 Clark St., Chicago, Ill.

The TOLL GATE! Prize Picture sent free! An ingenious gem! 50 ob-jects to find, address with stamp, **E. C. ABBEY,** Buffalo, New York.

POSTERS, Hand Bills, Dodgers, etc., printed in every style and at the very lowest figures, at the KANSAS FARMER Book and Job office, Topeka, Kan.

Seedmen's Advertisements.

LIBERAL PRICES TO KANSAS. GARDEN & FIELD SEEDS.

VEGETABLE AND

FLOWERING PLANTS.

Our Annual Catalogue free to all on application **D. H. BROWN & Sons, Seedmen, New Brunswick, New Jersey.**

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SEEDS

DEALER!

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