

ESTABLISHED, 1863.

TOPEKA, KANSAS, JUNE 2, 1875.

VOL. XIII, NO. 22.

The Kansas Farmer.

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

Agriculture.

AGRICULTURAL EDUCATION.

EDS. COUNTRY GENTLEMEN.—I quote the following from the volume of the Transactions of the Highland and Agricultural Society of Scotland for 1874:

"From the exceptional educational advantages which Scotland has so long enjoyed, agriculturists in this country have been greatly superior in point of instruction to those of most other countries, and it is also important to note that the increase in the value of landed property in Scotland has been exceptionally great. It was shown about three years ago, from reliable statistics produced by government, when the Irish land question was before Parliament, that while the rental of land in Ireland, had doubled during the previous hundred years, and that of England tripled, the rental of Scotland had septupled itself in the same time. There has been, then, in that space of time, an increase in the value of landed property in Scotland of 500 per cent., against an increase of 200 per cent in England and 100 per cent in Ireland. This is a remarkable fact; and there can be no doubt that the explanation of it is to be found chiefly in the early superior school system which Scotland has possessed, and in the intelligence and enterprise which it has been the means of developing among her agricultural classes."

"The subject is one well worthy the attention of landlords, as it shows what magnificent returns may be reaped from a judicious expenditure in providing suitable education for those who have the management and cultivation of the soil."

The writer goes on to say that of late years the educational superiority of Scotch agriculturists has not been maintained and is falling behind some other countries, as England, Ireland, Germany and other Continental nations.

There seems to me to be enough in these quotations to furnish a text for a long discourse upon agricultural education, and the close relation such education holds to rural prosperity in general. In several of the New England states, agriculture shows many symptoms of decadence, though there are numerous examples, offering pleasing contrasts, of prosperous husbandry. Our fathers have gathered the cream of the earth—leaving to this generation the subsoil mostly intact, and an impoverished coating of loam for the seed-bed. It is chiefly by the acquisition and use of knowledge, not within the grasp of our fathers, that we may hope to repair the injury wrought by them, and put our farms in a condition to yield satisfactory profits. With a wasting farming, there is the necessary wasting of human beings, who look to the farm for support. As a stream in a dry season affords each day a diminished volume of water, so the wasting farm steals away the funds that give means of education, so that the farmer is reduced to a non-supporting income, and he must needs give over scholarship, leisure, &c., to other classes of society.

It requires a vigorous effort to stop a body rolling down an inclined plane; hence, some, naming this body agriculture, and perceiving clearly the connection of all prosperity to agricultural prosperity, would have the people do much for this interest. It would be too much to assert that all agricultural modes tend to retrograde; there is much real progress. It may, however, be said with truth, that there are farmers and neighborhoods of farmers in every considerable section of New England, that require a new impulse from without need an education forced upon them, in order that they retain a respectable position in life's struggle. The remark of Wendell Phillips, that not location, but brains make cities, suggests the statement that in many places brains must be our agricultural capital. This position should be particularly emphasized by those persons who take the deepest interest in the coming education, of which our present agricultural schools are the prophecy. I did not expect to say so much. The theme is fruitful, but I would only lead the reader again to our Scotch quotations, and consider their significance. Think what would be the differing effect upon our communities, upon human happiness, whether one or the other of the following suppositions were realized:

1. That the rising generation of farmers' boys should not have by say 20 per cent. the amount of agricultural education possessed by the present generation.
2. That farmer boys should have supplied them 20 per cent. more agricultural education than the parents have acquired.

In realizing the latter supposition, should we not realize a remarkable increase of country values, similarly to that made known to us by the Scotch writer quoted, and a country more beautiful to look upon and furnished with more enjoyable homes.

JOSEPH N. STURTEVANT.
Waukegan Farm, S. Framingham, Mass.

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

THE LIFTING POWER OF PLANTS.

President Clark, of the Massachusetts Agricultural College, has, by a series of very interesting experiments, been testing the lifting power of plants. In the 22nd Annual Report of the State Board, President Clark gives the following experiments:

First. It is a well known fact that beans, acorns and other seed often lift up comparatively heavy masses of earth in forcing their way up to the light, in the process of germination.

Second. We have all heard how common mushrooms have displaced flagging stones, many years since, in Basingstoke, and more recently in Worcester, England. In the latter case, only a few weeks ago, a gentleman noticing that a stone in the walk near his residence had been disturbed, went for the police, under the impression that burglars were preparing some plot against him. Upon turning up the stone, which weighed eighty pounds, the rogues were discovered in the shape of three giant mushrooms.

Third. Bricks and stones are often displaced by the growth of the roots of shade trees in the streets. Cellar and other walls are frequently injured in a similar way.

Fourth. There is a common belief that the growing roots of trees frequently rend asunder rocks on which they stand, by penetrating and expanding within their crevices.

Having never heard of any attempt to measure the expansive force of a growing plant, we determined to experiment in this direction.

We were surprised last year, in testing the pressure exerted by the sap of various trees, to find that a black birch root detached from the tree, was able to force water to the height of eighty-six feet. We were therefore somewhat prepared for an exhibition of considerable power, but the results of our trials have, nevertheless, been most astonishing.

At first, we thought of trying the expansive force of some small, hard, green fruit, such as a hickory nut, or a pear, but the expansion was so slow, and the attachment of the fruit to the tree so fragile, that this idea was abandoned. The squash, growing on the ground with great rapidity and to an enormous size, seemed on the whole the best fruit for the experiment.

Accordingly, seeds having been obtained from Mr. J. J. H. Gregory, of Marblehead, they were planted on the first of July, in one of the propagating pits of the Durfee Plant House, where the temperature and moisture could be easily controlled. A rich bed of compost from a spent hot bed was prepared, which was four feet wide, fifty feet long, and about six inches in depth. Here, under the fostering care of Prof. Maynard, the seeds germinated the vine grew vigorously, and the squash lifted in a most satisfactory manner.

Never before has the development of a squash been observed more critically, or by a greater number of people. Many thousands of men, women and children, from all classes of society, and of various nationalities, and from all quarters of the earth, visited it. Mr. D. P. Penhalow, watched with it several days and nights, making hourly observations.

Prof. H. W. Parker, was moved to write a poem about it, and Prof. J. H. Seelye, declared that he positively stood in awe of it.

The pistillate, or female flower, on the 21st node of the growing vine, was artificially impregnated with pollen, from a staminate, or male flower, on the 1st of August. The young squash immediately began to enlarge, and on the fifteenth of the same month, measured twenty-two inches in circumference, and on the sixteenth, twenty-four inches, and on the seventeenth, twenty-seven. Though the rind of the young fruit was very soft, it was now determined to confine it in such a way as to test its expansive power. In doing this, great care was taken to preserve the health and soundness of every part of the squash, and to expose at least one half of its surface to the air and light. The apparatus for testing its growing force, consisted of a frame or bed, of seven inch boards one foot long. These were arranged in a radial manner, like the spokes of the lower half of a wheel, their inner edges being turned toward the central axis. These pieces were held firmly in place by two end boards, twelve inches square, to the lower half of which they were secured by nails and iron rods. A hemispherical cavity, about five inches deep in the center and eight inches long, was cut from the inner edges of the seven boards, and in this the squash was carefully deposited, the stems and vine being carefully protected by blocks of wood from injury by compression. Over the squash was placed a semi-cylindrical harness, or basket of strap iron, firmly rivetted together. The meshes between the bands, which crossed each other at right angles, were about one inch and a half square. The harness was twelve inches long, and the same in width, so that when placed over the squash, it just filled the space between the end boards. Upon the top of the harness, and parallel with the axis of the cylinder and the squash, was fastened a bar of iron with a knife edge to serve as the fulcrum of a lever to support the weight by which the expansive force was to be measured. At first, an iron bar, one inch square, was used for a lever, then a larger bar of steel, then a lever of chestnut plank, then one of seasoned white oak plank, and, finally, one of chestnut, five by six inches square, and nine feet long; but even this required to be strengthened by a plate of iron

four inches wide by half an inch thick and five feet in length. The fulcrum for the lever was also renewed from time to time as the weight was increased.

The following table shows the weight of iron lifted by the squash in the course of its development:

Date	Weight (pounds)
August 21	60
" 22	69
" 23	93
" 24	123
" 25	225
" 26	277
" 27	356
" 28	500
Sept. 11	1,100
" 13	1,300
" 14	1,300
" 15	1,400
" 16	1,700
" 17	2,015
" 18	2,115
October 3	2,500
" 13	3,120
" 24	4,120
" 31	6,000

The last weight was not clearly raised, though it was carried ten days, on account of the failure of the harness iron, which bent at the corners under the enormous pressure of two and a half tons, and consequently broke through the rind of the squash. It was not feasible to remove the harness and substitute for it a stouter one, on account of its being imbedded in the substance of the squash, which grew up through the meshes of the harness forming protuberances an inch and a half high and over November, the harness was removed in order to take a plaster cast of the squash, it was necessary to cut the straps with a cold chisel, sometimes into several pieces, and draw them out endways.

CORN INJURED BY WHITE GRUBS.

A subscriber residing in Lawrence county, Pa., writes that the White Grub was very abundant in his neighborhood last summer, destroying entire cornfields as well as meadows, by eating the roots of both corn and grass. They commenced upon the corn when it was about a foot high, and continued to work at the roots during the entire summer.

We do not usually attempt to name or identify an insect without specimens or a full description, but in this instance we have no doubts in regard to the one referred to under the name of the White Grub, as they are too common and widely known to be mistaken for anything else. These White Grubs are the larvae of some of the numerous species of May beetle, which frequently enter our houses in the evening during the spring or early summer months, as they fly about at night and are attracted by the light of a lamp or fire. The female beetles usually deposit their eggs in grass lands or uncultivated fields and the grubs feed upon the roots of various plants and live in this state two to four years. If pasture or meadow lands are plowed and the grass killed, then planted with corn or other similar crops, the grubs having been deprived of their food, would naturally seek the roots of whatever plant they could find. These grubs are especially fond of the roots of corn and strawberries, and they will also feed voraciously on potatoes; hence the frequent failure of such crops upon sod, although otherwise it is usually considered preferable to land which has not been seeded down with grass.

Now, the grubs which were so destructive to the corn last season may all pass through this last transformation and become beetles this spring, seeking uncultivated fields for future depredations; but of this we cannot be positive without an examination of the infested field. In plowing the old cornfields this spring they should be carefully examined for grubs, and if none, or only a few are found, then it will be safe to plant again with corn, because the beetles will seldom frequent a cornfield for the purpose of laying their eggs there, preferring a less disturbed location.

The Crow and Blackbird are the great natural enemies of the White Grub race, and whenever these birds frequent a newly plowed field we may rest assured they are doing us a favor in eating the larvae or fully matured May beetles. We have seen crows follow the plowman upon our farm for hours at a time, searching for these and other kinds of grubs. For these and other very good reasons, we do not permit crows to be killed or frightened from our premises, and if they want a little soft corn at the time their young are hatching in the spring, we provide it and save them the labor of pulling up that which we have planted. Farmers should remember that the more birds the less insects; and as a rule the former are preferable to the latter.

Soaking seed corn in tar water will prevent the attacks of some kinds of insects. We have no experience with it as a preventive for the White Grubs, but it might be worth trying. We do not know of any better way of ridding a field of White Grubs, than continued cultivation and assistance from birds.—Rural New Yorker.

RUST IN WHEAT.

Concerning the much vexed question of rust in wheat, the writer says:

I once saw three varieties of wheat sown on the same day, with the same kind of preparation, an acre of each, side by side. One variety took the rust, the others did not. The atmospheric influences were the same on all those kinds, but one kind, to use my illustra-

tion, was of a consumptive family, the others had no hereditary taint of rust. I have watched such facts closely.

If, then, there is a hereditary tendency in some kinds of wheat to rust, what is the remedy? Why, not to sow them, and seek those healthy families that have nearly proven themselves to be rust proof.

Some contend that the earlier you can bring wheat on, the less danger of rust. That may be of some service, but not much; for the close observer will always see that rust strikes wheat at a certain period of development, whether early or late—after the blooms have fallen and the wheat begins to ripen—just like consumption strikes human beings at a certain period of development.

Some say not weather, others cool weather, others dry weather, others wet weather, &c., &c., produces rust. Who is correct? The painful fact is, it comes at a certain period in any kind of weather.

FORAGE PLANTS IN KANSAS.

BY PROF. E. M. SHELTON.

Kentucky Blue Grass.

In respect to nutritive value blue grass ranks beneath timothy, and indeed with the lowest of the grasses. But from its abundant growth both early and late in the season, its dense habit, and especially for its ability to withstand the effects of drought, it is to the west and southwest, the most valuable of all grasses for pasturing. It is not, however, without value for mowing. When cut just before the seeds have ripened it makes hay which is greatly relished by cattle. In respect to quantity it is inferior to timothy or clover, a ton of blue grass being considered a good yield.

A dry, warm, calcareous upland is best suited to the growth of blue grass. In Kentucky the finest pastures are obtained in old parks and orchards, or other lands that are partly shaded.

It can hardly be denied that blue grass is to be to Kansas farmers, as it is to the farmers of Illinois and Missouri, the great pasture grass. No other grass promises so well to occupy the place of the ordinary grasses of the prairie. Its superiority over the native grasses for early and late feeding is already well understood, and the experience of the past season seems to show that it is equally well adapted to our dry summers. It has already been introduced west of the center of the state, and in no case have I heard of its failing or materially injuring from the protracted drought of 1874. Upon the College farm we have more than an acre which by the way of experiment was sown upon a very dry and exposed position. Immediately after the warm weather of last year had abated it began to show signs of vigor and soon after the first rain it formed the thick and brilliantly blue-green carpet for which this grass is so celebrated.

It seems to be generally acknowledged that where a stand is once obtained no further difficulty need be expected. The real work is in getting the start. Those who suppose this difficulty to be peculiar to the soil and climate of Kansas will do well to bear in mind that, even in Kentucky, at least two or three years are required before the grass becomes well set, and its full perfection as a pasture grass is not attained until the sward is older than that. For this reason blue grass does not belong with the rotation grasses. It is best adapted to permanent pastures and those lands which are to be laid down a number of years.

SEEDING.

It has sometimes seemed to me that the less one knew of Eastern methods for farming the better would be his chances of success in Kansas. The novice would certainly have less to unlearn than the adept from the east. In nothing is the worthlessness of eastern data, when applied to Kansas, seen more strikingly than in the matter of seeding. Eastern farmers sow the seed upon the late snows early in the spring, and Kansas farmers have very generally adopted the same practice. I am satisfied that a very large share of the failures made in attempting to grow blue grass, are attributable to this practice. Thoughtful farmers must see that winds which frequently carry away the surface of entire fields to the depth of an inch, will carry away buoyant seeds like those of the blue grass, when left upon the surface of the ground. The common charge is that seed procured east, is usually worthless. I am inclined to think that this is less true than is generally supposed. During the present season, I have carefully experimented with some specimens of seed procured from St. Louis firms; seed that was covered with mould, and had a very suspicious look; yet fully nine tenths of this germinated, and made a vigorous growth.

While a partial "catch" will often be obtained where the seed is sown among the prairie grasses, blue grass will abundantly repay a more careful preparation of the seed bed. Let the ground be well prepared, and the surface made fine with the harrow. Upon this sow fully 1½ bushels of clean seed per acre, and harrow in thoroughly, following the roller. If reasonable rains follow, or the ground is moist, the fine delicate sprouts will be seen in a few days.

No stock should be allowed upon the land the first year, nor until late the following season. Where this course is pursued failures need be apprehended only during exceptionally severe seasons.—Industrialist.

Horticulture.

CAN WE EXPECT PROFITABLE RESULTS FROM FRUIT CULTURE IN KANSAS?

[A paper read by Prof. Gale before the Manhattan Horticultural Society, May 12, 1875.]

To a live Kansan this would have been a strange question one year ago. But as we look over the disasters of the past year some of us are more or less in doubt. We have, in some parts of the State, seen much to discourage, and we are hardly in a proper frame of mind to measure the promises of success. If all our experience of the capabilities of Kansas was confined to the year 1874, we certainly should have little to hope for in the future. But we already know enough of Kansas to regard the trying experiences of the past year, in the extent and completeness of its disasters, as exceptional. It is also worthy of note that the fearful misfortunes of 1874 were very much increased by the fact that our orchards were generally young. The older the apple orchards the less have they suffered, as a rule. If we examine trees that are twelve or fifteen years old we find them very slightly injured. Such, for example, is the case in Mr. Line's orchard, planted in 1860. The same is true in other orchards. This is a fact which should be well considered by the disheartened class, for it is to be remembered that in our eighteen or twenty years' experience in Kansas, there has been no year which equalled, in the severity of trial, the year 1874. Now, if our orchards had been planted five or ten years earlier, it would have been hardly possible for us to have suffered as we have. We know from this fact and others which we have not time to mention, that many of the disasters of the past year, grew out of the comparatively recent settlement of the State, and many of them also out of our want of experience in such an emergency. For example, could we have foreseen the effects of defoliation upon the exposed trunks of our fruit trees we could have prevented by wrappings of some kind the sun-scald, and to a large extent the subsequent work of the flat-headed borer.

Small fruit and shrubbery could have been saved in many instances by similar appliances. If such emergency should again occur we shall doubtless be prepared to meet it. Thus much it seemed necessary to say in relation to the experience of the past year, in clearing the way for the consideration of the claims of Kansas as a fruit-growing State.

PROFITS OF FRUIT CULTURE IN OTHER STATES.

We know that fruit culture under favorable circumstances is a profitable employment, and will rank fully up with any other of the great agricultural pursuits of the land. In the great fruit regions of this continent, land covered with bearing orchards has become exceedingly valuable. Some of this land in western New York is held at a thousand dollars per acre and is reasonable at that price. Two years since there was sold from nineteen acres of orchard in Niagara Co., N. Y., \$7,280 worth of apples. From another orchard, consisting of one hundred and forty Baldwin trees, there were sold nine hundred and eighty barrels of apples at \$3.25 per barrel; or \$3,185 from an orchard which would occupy three or four acres of land.

Pear culture in western New York is equally profitable. We find upon the sixtieth page of the *Horticulturist* for the current year the history of a pear orchard owned by John Taylor, of Elba, N. Y. For six years after planting, this orchard yielded no fruit. For the four subsequent years the proceeds of the orchard are stated below. Amount of land, three acres:

Item	Value
Cost of trees,.....	\$500 00
Preparing ground and setting trees,.....	200 00
Interest upon the same for ten years,.....	400 00
Total cost of orchard,.....	\$1,100 00
Income the seventh year,.....	\$300 00
" eighth ".....	1080 00
" ninth ".....	1100 00
" tenth ".....	1125 00
Total income,.....	\$3505 00
Actual profit,.....	\$2405 00
Profit per year,.....	240 50
Profit per acre for the ten years,.....	80 00

During all these years potatoes have been grown between the rows of trees and have more than paid the cost of cultivation. Besides it is to be remembered that the orchard has just begun to bear, and the profits will probably be much greater for years to come.

A case came to my knowledge in Illinois where, a few years since, the fruit upon a young orchard of eighty acres was sold upon the trees for \$5,000, that is \$62.50 per acre.

PROFITS IN KANSAS.

These results are not attained without intelligent selection and culture. Our experience in fruit culture here in Kansas is short, but we have even now some facts which will compare well with the above. For example take the following: In 1872 twenty Wine apple trees ten years old yielded two hundred bushels and sold for \$1.00 per bushel. The same year twenty Winesaps, twelve years old, yielded two hundred bushels and sold on an average for \$1.50 per bushel, or \$15.00 per tree. In 1873 fifty Genets yielded two hundred and fifty bushels, at twelve years old, and sold for \$1.75 per bushel; and in 1874, fifty Genets yielded five hundred bushels and sold for \$1.00 per bushel. In the latter case the grasshopper

pers ruined fully one-half the crop. Three hundred cherry trees, Early Richmond, yielded in 1874 three hundred bushels of cherries, which sold at three dollars per bushel. The above facts are reported by G. O. Brackett, Esq., Douglas County, Kansas. These can be substantiated by others gathered from different sections of the State. But it may be said that these are remarkable results. We shall have reason to be abundantly satisfied even if we fall far below these figures. Such results are not attained without care. They are not the product of chance. But the same intelligent attention to some essential point will bring out the same results in our hands.

We have every reason to be encouraged with reference to the future. The first requisite to successful fruit culture is good trees, and we know there is no place where trees grow more vigorously and beautifully than in Kansas. We shall never find better trees than can be grown on our soil. This is true both of young nursery stock and of our oldest orchard trees where they have received reasonable care. As far as the apple is concerned, with a judicious selection of varieties there can be no reasonable fear of failure. In due time the harvest will come and the reward will be sure and abundant.

TWO FACTS.

But we ought to remember two facts: (1) That no success in fruit culture can be attained without patient and constant care. (2) That several years must pass before we can anticipate any remunerative returns.

Many seem to imagine that all they have to do is to plant a few trees and leave them to the contingencies of neglect, then hoping for profitable returns. Now we know that this cannot be. The earth has yielded since the days of our first parents very poor apples without care. There are enemies on every side, and it is well it is so, for otherwise the sluggish and the diligent man would sit down to the same board. If fruit would grow without care it would bring a very inadequate reward to the cultivator.

But the second fact named, that several years must pass before we can expect returns, has a very important bearing upon the great interest of Horticulture. We frequently wait five, seven and sometimes ten years, for the first return. With the ordinary farm crop each year brings its return, and if we have selected a poor variety we find it out at the end of the first season, and next year we can correct the mistakes of this year. But in fruit culture it is far different. Here our field is planted once for a life time. Mistakes swell fearfully in magnitude when we come to deal with trees which are to bring forth bountiful crops of fruit, or to cumber the ground long years after we are gone to the other world. There can be no question but that much of the success of fruit culture will depend upon the intelligence in the selection of varieties. It is certain, also, that we know as a people very little of what ought to be known on this point. Fortunately we have had very few enthusiastic experimenters in this direction. From the force of circumstances we have all to a certain degree been experimenting. The work so far accomplished is exceedingly valuable to the State. But we can hardly estimate the

ACTUAL COST OF SUCH EXPERIMENTS.

Let us illustrate by two or three actual cases. Mr. Grubb has planted fourteen hundred apple trees, consisting of eighty varieties. He tells us that there are scarcely ten varieties that are worth planting. His ground is cumbered with a very large percentage of trees which can be of no value. They have been a source of expense and no profit. As far as he is concerned the only return which he gets is this, viz: the knowledge that so many hundreds of his trees are practically valueless.

Again, Mr. Wm. Tanner has five thousand trees, consisting of one hundred varieties. In 1874 these trees gave him a return of \$3,200. He is reported as having said that if he had planted only those trees which he now knows to be the most profitable he would have realized \$10,000 last year. Now Mr. Tanner has done a valuable work for his part of the State, but we can readily see it has been done at a fearful cost already, and at a cost which, to a large degree, must go on for many years to come.

Another gentleman reports last year an income of \$200 from his orchard, but if he could select his trees with his present knowledge he would more than treble his income.

THE BUFFALO GNAT.

The insect called the buffalo gnat, which has been destroying hundreds of horses and mules in Arkansas, Mississippi and western Tennessee, is not the black gnat common in higher latitudes. Neither is it the tsetse (*Glossina morsitans*), a dipterous insect, described by Dr. Livingstone as a terrible pest of some parts of South Africa. This gnat is somewhat larger than a common house fly, of a brown color, with four yellow bars across the abdomen; whereas the gnats of southwest, says the Atlanta Herald, are only about one-half the size of the universal house fly. They come in the air in countless numbers; the air is full of them when they appear at all, and their appearance is always sudden and overwhelming. They forthwith settle upon every horse, cow, mule or four footed animal in sight; and in this respect they resemble the tsetse, domesticated animals being alike the victims of the two continental pests. They literally cover an animal, owing to their immense numbers, and the animal that is attacked, say at night, will be dead in the morning, and swelled to an enormous size. Their bite is very poisonous, causing the wound to fester almost as soon as made.

The tsetse of Africa does not attack wild animals, whereas the buffalo gnats attack every wild animal they can reach, especially the deer. Fortunately, they have no appetite for human blood. The true buffalo gnats are small, jet black flies, each of them having a hump back or shoulders, like the buffalo, from which peculiarity they undoubtedly derive their name. This gnat is furnished with a flexible proboscis like a sheath, and it is enabled to pierce the skin and at the same time inject an irritating and poisonous fluid.—*Colman's Rural World*.

We read in the Bible, in the 19th chapter of 1st Samuel and the 19th verse, that "There was no smith to be found throughout all the land of Israel." Of course not. All the Smiths were living in this country at that time, and they have wonderfully increased and multiplied since then.

THE APIARY.

Let the sun shine on the hives as much as possible this month to promote breeding. Continue to feed weak stocks as directed last month and suspend feeding only during the harvest when fruit trees bloom, as many stocks will need feeding again just before the white clover honey harvest. All stocks should be examined and every queenless swarm united with a colony having a fertile queen. A few honey boxes may be put on strong stocks, but only one box at a time, and great care should be taken to prevent all upward ventilation and secure the rearing of brood rapidly in every stock. Large white pieces of comb should be fastened in each box, and large openings made for the bees to enter from below, as much more surplus honey will be secured if boxes are partly filled before the swarming season. A few eggs of the moth miller will begin to hatch early this month and the worms should be destroyed in the morning so as not to disturb the bees when gathering honey later in the day. It is true that every worm that escapes may change to a miller and lay tens of thousands of eggs, still we have little fear of miller's eggs or worms if all stocks are kept in good condition and no comb left in the yard for moth nests, unless saturated with red pepper, as proposed in a receipt generously published by the inventor, in this number of our paper.

PREPARE FOR SWARMING.

If the apiarian is not already supplied with hives, no time should be lost in procuring them or material, so that all painting may be done and thoroughly dry before bees swarm. Swarms will sometimes desert hives soon after being hived because of the smell of fresh paint, but the more common cause is that the new hive is hot on account of standing in the rays of the sun either before or after hiving the bees. We always keep new hives in a cool, shady place, and either shade a hive from the sun or remove it to a stand in the shade soon after hiving a swarm. Still, to avoid the possibility of a new swarm leaving the hive, we obtain a card of comb which contains honey and unsealed brood and place it in the new hive just before hiving the swarm. Should any cause prevent the bees in the swarm from gathering honey for a few days, the honey in the card will supply them and prevent hunger being a cause for deserting the hive, while the card or comb will induce the bees to build the other combs parallel within the frames. We, however, advise bee-keepers to attach a thin strip of worker comb to each top bar by dipping it in melted beeswax about blood heat, though strong swarms with young queens will seldom build much drone comb, and will follow the comb guides in the frames; but weak, and first swarms with old queens, will build much less drone comb by having a start of workers comb in each frame.

Bee-keepers who are too lazy or careless to attend to these little items will not be likely to succeed. The careful bee-keeper will be the successful apiarian, yet bees should be disturbed as little as possible. When we had a large apiary, years ago, we could detect anything wrong with a stock, when walking leisurely through the apiary, but we did not open a suspected stock until we were quite sure it needed opening.

ROBBING.

Great care must be taken to prevent robbing, which is caused by death in the honey harvest, carelessness in feeding, leaving entrances open too wide, opening hives when bees are gathering but little honey, carelessness in transferring, or leaving pieces of honey, other sweets, or weak stocks exposed to demoralize the bees. An "ounce of prevention is worth a pound of cure," is true with reference to robbing, and it is also true that "a stitch in time saves nine," if taken in the incipient stages of robbing.—*Bee-keepers Magazine*.

SMUT IN WHEAT.

A California correspondent of the Department of Agriculture, writes: "We have neither rust nor smut in any of our wheat fields. I beg leave, respectfully, to differ from the advice given on page 487 of the monthly report of the department for November and December, 1871, wherein farmers are advised to 'discard all ideas of mixing ingredients with it (seed wheat) to destroy smut.' This question has been so well and thoroughly tested in our state as to be no longer even a matter of doubt. All our seed wheat is soaked from eight to twelve hours in a solution of bluestone (sulphate of copper) in the proportion of six ounces to every one hundred pounds of wheat. Smut being a fungoid growth, resulting from diseased grains, the germ of vitality of these diseased grains is killed by the solution of vitriol, and thus prevented from growing and contaminating the sound grains. A farmer here would be thought crazy were he to sow his wheat without subjecting it to the above process.

ROOM DECORATION.—There has stood on the table of my room in my house, for thirteen months without a break (says a writer in the *Gardener's Magazine*), a nice young plant of *Corypha australis*, and in the course of that time it has not lost a frond, but has made six new ones that are as healthy and well developed as any one could wish. The room which this palm adorns is not particularly well lighted, and the light comes from one side only; yet the plant is as symmetrical as if it had never been out of a first-class plant house. The room is sometimes cold and sometimes warm and is occasionally well filled with tobacco smoke. But these varying conditions make no difference, the plant persists in thriving, and illustrates in a most pleasing manner the adaptability of this class of plants to domestic purposes.

COAL ASHES.—The question of the real value of coal ashes in Agriculture has often been raised, but nothing very definite determined. At the last meeting of the Pennsylvania Horticultural Society, Mr. J. B. Jones said that he had found coal ashes exceedingly useful to put around trees, stimulating them, making good mulch and surpassing in their effects good composts.

Mr. Hoopes said that coal ashes were invaluable for mellowing heavy clay soils.

Mr. Landis had found them very effective as a protection against mice in a young orchard. Dig the ground away, and put ashes some inch or two deep, and he had no trouble afterward with mice.

Mrs. Weekly, at a late meeting of the Montgomery county (Ohio) Horticultural Society, said she had a favorite green gage plum tree in her yard, saved from the circle by hanging branches of elderberry bushes in it; and Dr. Griswold has succeeded in driving the striped bug from cucumber plants by means of branches of the elder plant, but was not aware of their efficiency in the case of the cucumber.

Scientific Miscellany.

THE USE OF FLIES.

Mr. Emerson, chemist, West Hartlepool lately set himself to discover if there were any ends accomplished by that one drawback to the lovely summer months, the common house-fly. He communicates his experiments to a local paper, and has since forwarded an account of them to us. Having secured one and laid him on his back, and glued his wings to the object glass of a microscope, he observed that the little animal was covered—legs, body and wings—with an innumerable quantity of lice. "I was so disgusted (Mr. Emerson proceeds) with what I had considered a pretty fly that I loosed his wing and let the lousy fellow go, after his departure, however, I remembered I had not got the information I desired, viz: his use and habits, so I caught another and put him into the same position as the former one, and to my dismay, found him lousy as the first. I thought this very singular, but I was determined to have a close inspection; I got part of a wing into eight which was beautiful, until I caught a view of the head of one of the vermin coming along to invade my pleasure ground with his unsightly body; I shifted my glass to get a peep at the body, when one of the legs of the fly came dangling into view, and on the tiny shanks were some of my old enemies. What is that I see? A miniature elephant's trunk now comes in view and looks up a quantity from the leg. I move the glass to have a look at the fly's head, to see how he appears in his confinement; what a splendid, large eye! He is busy with his proboscis or tongue going rapidly in all directions, and by the expression of his eye, looks as if he was quite satisfied, and enjoying his meal. I move the glass again to examine his body, which is covered with the vermin, and every now and anon there was a switch of the tongue, licking them off; these must be her progeny (I had up to this time treated my captive in the masculine gender), eating the offspring. I gave liberty to my object, and was more than ever out of love with my fly. I went into the kitchen to watch their gambols around the gas bracket, and to admire their swiftness through the air, and wondered if they were happy, with their young hanging about them; but I had not lost faith in their innocency, and also the harmlessness of their alighting on my bread and butter. I observed a piece of clean note paper lying on the dresser; presently two flies lit on it, and appeared to be licking something off of it; I laid hold of the paper and took it to the microscope; I put one corner on the glass and there was some of the progeny of the fly on it. This set me thinking. I took a cloth and rubbed the paper well, then tried it again and found none on it. I took it into the kitchen again and watched the paper around, taking care that no flies touched it, went back to the microscope, and there found animalcules, same as on the flies. I had now arrived at something definite; they were not the progeny of the fly, but animalcules floating in the air; and the quick motions of the flies gathered them on their bodies, and they went into some quiet corner to have their dainty meal. Further experiments convinced me that I had found the real use of the flies. I afterwards caught one in a bed-room; it was one of Pharaoh's lean kind, examined it, and there were no animalcules on it, neither could I get any in the room. I then tried the yard near the kitchen, and found very few there; then went into the back street, where it was neither very sweet nor clean—that morning the scavengers had been cleaning out the ash-pits—got plenty on my paper there. I arrived at the conclusion that instead of the flies being a pest and a nuisance, they are the friends of mankind; and should not be slaughtered wholesale, as they generally are; for, wherever there are the most animalcules there will be found the most flies to feed on the same. These experiments were made in sultry weather. I always found my sport spoiled after heavy rain and strong winds, for then I could not bag much game; and when frost set in, I found none. I may say that I have tried an endless variety of disinfectants and purifiers to overcome these animalcules, and that I found nothing so effectual as burning sulphur on a dust pan, and carrying it about the place."

Mr. Emerson adds that he is now investigating the spider, and is trying to discover what is the use of him. If your correspondent should conclude that the main use of spiders is to catch flies, that the use of flies is to catch lice, he will be in duty bound to proceed to the remaining problem respecting the purpose served by the last named tribe. Whatever this may be, Mr. Emerson certainly deserves credit for his patient and skillful investigation, and for his interesting and, we believe, novel observations.—*Chemist and Druggist, London*.

A series of experiments on inoculation with bee poison, made by Mr. G. Walker, is described in the department of "Nature and Science" of *Scribner's Monthly*. The method of procedure was to permit a bee to sting him on the wrist, care being taken to obtain the largest amount of poison. On the first day, this operation was performed twice. The effect was a severe superficial erysipelas, with the ordinary symptoms of inflammation. After a few days, these symptoms having disappeared, he caused the insect to sting him three times in quick succession. Though the erysipelas inflammation was not so severe, a singular sensation extended up to the shoulder, and enlargement of the lymphatic glands in the neck showed that the poison had been absorbed into the system. A few days afterward he again received three stings, which were attended by symptoms of less intensity. After the twentieth sting there was only a slight itching sensation for a short time in the immediate vicinity of the wound, and the effects of the inoculation appeared to be perfectly satisfactory.

GROWING AND TRANSPLANTING FLOWERS.—I take good, thick paper, cut three corners off, and double it in the shape of a tunnel; fill with dirt and plant a seed in each one; bury it in a box filled with earth. The seed will soon germinate. When the plants are ready to remove to the flower bed, lift the paper out and plant it like roots. The paper will soon rot and the plant will never wilt. I planted Nasturtiums in this way with perfect success.—*Exchange*.

An emulsion of raw meat is advised as a nutritious form of diet for convalescents. Eight ounces of raw meat, with two and a half ounces each of sweet and bitter almonds and white sugar, are beaten together in a mortar until completely homogeneous, the almonds having first been blanched. The compound may be beaten up with egg or milk and water in any consistency.

Farm Stock.

CURES FOR HORSE AILMENTS.

The following receipts are selected from the best authorities. For many of them we credit the *Spirit of the Times* and the *Turf, Field and Farm*, both valuable papers as reference on such matters:

SPLINT.

In all probability it can be removed by the following sweat blister: Tinct. cantharides, oil turpentine, of each, one ounce; oil spike, two ounces; corrosive sublimate, one drachm; linseed oil, three ounces; alcohol, one pint. Mix thoroughly, and apply once a day, with good hard-rubbing over the region of the region of the splint until considerable counter irritation is produced, then omit for three days, and apply again as directed.

TO PROMOTE THE GROWTH OF A HORSE'S FROG.

A great deal depends upon proper shoeing. The diminution of the substance of the frog through the absurd practice of unsparingly cutting it away, and in consequence elevation above the ground, causes more or less contraction of the feet, thus interfering with the proper growth of the frog. On the other hand, the blacksmith often carries his notions of frog pressure to an absurd extent, leaving the frog beyond the level of the sole. Both extremes are to be avoided. The rough and detached parts should be cut off at each shoeing, with sufficient of the substance of the frog to bring it just above or within the level of the shoe. Cleanliness in the stable will also tend to promote the growth of the frog. In this regard Mr. Bonner's example may be profitably imitated. An ointment, compounded of equal parts of whale oil, beeswax and Burgundy pitch, applied to the frog when the horse is put up for the night, will remove soreness, and, in a measure, stimulate the growth of the frog. Sponge well and dry the feet before applying the ointment.

LICE.

A simple remedy is a strong infusion of tobacco, rubbed well into the hide twice a day. Another remedy, but requiring the greatest caution, is a solution of corrosive sublimate. The skin being once cleaned of them, a strict attention to cleanliness will prevent their re-appearance.

SCRATCHES.

Apply daily, by means of a small brush, a liniment composed of iodide of potassium, one drachm; glycerine, two ounces. Give the horse in his food, half an ounce of Fowler's solution of arsenic every other day for a fortnight, and afterwards twice a week.

TO GROW HAIR WHERE THE HORSE HAS BEEN BLISTERED.

The daily use of blue mercurial ointment, ment, mixed with four times its bulk of lard, will promote the growth of hair on the blistered part; if the hair follicles are not destroyed, in which case nothing will be of any use.

ENLARGED PETLOCK.

Try the effects of biniodide of mercury ointment, two parts to eight of lard. Clip the hair from the enlargement, and rub the ointment in for four or five minutes every morning until a free, watery discharge is produced from the surface. To facilitate this, the leg should be fomented with very hot water every morning and afternoon, and this should be continued for several days after the ointment has been discontinued. If after a fortnight's interval, the enlargement does not appear much reduced in size, the ointment should be reapplied and repeated at similar intervals, until the swelling is reduced.

Crib biting is unsoundness, and it is always associated with disorder of the digestive organs.

FITTING HORSE SHOES.

Horse-shoeing, as commonly practised in both city and country, can scarcely be considered in any other respect than as an unmitigated evil. The usefulness of the horse depends upon his feet, and if he have not their proper use, his utility is lessened to the extent that the foot fails of the discharge of its function. Farmers should realize how important the farrier is and how much he may effect the value of their property in horses, and their pleasure and safety in their use. But notwithstanding the importance of science and reason in an art involving so much property, and touching also humanity in the care of the most important servant to man, the practice of farriery in the hands of those who commonly exercise it, is much in the position that surgery was, when operations were only performed by barbers. So unsuccessful and rude in the ordinary practice, that horses as a general rule fall first in their feet, and these diseases are the most difficult to manage, because the veterinary is thwarted at the outset by the ignorance of the farrier, who persists in methods that are the immediate cause of the very disease the surgeon is expected to cure. It is this continual conflict between reason and ignorance that has made the question of horse-shoeing the despair alike of both owner and surgeon, especially in cities. But as it is always darkest just before day, light is discovered breaking in the fact, that there is a growing discontent with the old methods on the part of the public, and a return, by some of the more recent writers, to the teachings of Laffay, Freeman, Osmer, and other writers of the last century. Even the book written by Murray has a chapter full of sound doctrine, drawn from the best sources, upon the care of horses' feet, advocating the full use of the frog on the ground, and light shoeing, merely to protect the crust from attrition.

STOCK SALES.

The joint public stock sale which took place at Bloomington, Ill., resulted as follows:

The gross amount of C. M. Nicolls' sale of sixty-three head was \$23,180, an average of \$368. The finest animals sold were, Princess \$2,800, and Mazurka of Lyndale 4th, \$1,925—both to J. V. Grigsby of Winchester, Ky. Oxford Gwynne was sold to E. L. Davison of Springfield, Ky., for \$1,450. Mr. Davison had previously purchased Princess Gwynne 10th at C. C. Parks' sale at Waukegan, Ill.

A. C. Funk's sale of thirty animals amounted in the aggregate to \$18,365, an average of \$445.

N. Franklin's sale amounted to \$3,630; average, \$259.

Wm. M. Smith's sale amounted to \$3,870; average, \$242.83.

W. R. Duncan's sale amounted to \$1,285; average, \$257.

Two of Mr. Funk's animals brought \$1,500 each, and one, \$1,800.

The total sales of J. H. Spear's herd, which took place April 20th, reached \$47,505. The liveliest interest centered on the bull Duke of Airdrie which was started at \$5,000 and sold to Gen. E. C. Lippincott, state auditor, for \$10,500.

Educational.

EDITED BY PROF. J. B. HOLBROOK.

"SACRED BEAUTIES" OF ENGLISH ORTHOGRAPHY.

Eloquent Principal Dwight is not alone in loving regard for the sacred beauties of the temple, orthography. Every man, at least every conservative creature of scholasticism, who has made his reputation by laboriously seeking the affinities and analogies of language through the tortuous labyrinth of our spelling, is firmly grounded in the belief of the existence of the sacred beauties. They ramble among words, after the manner of dilliant, finding here and there a symmetry, whose rarity induces them to search for more; on discovering which, they burst into strains of admiring astonishment, and of astonishing admiration; for it increases in proportion as the beauties become obscure and uncertain. Their astonishment would seem to get the better of their judgment; they are so rapt with the appearance of a few beauties on the vast barren plain of orthography that, like the Arab, contemplating the oasis, rendered beautiful by contrast with the howling waste without, they imagine themselves beholding the one thing beautiful, the *oasis kaion*, and it acquires all the sacred attributes of Divinity; and whoever would attempt to extend the bounds of their oasis to the limits of the desert, exhibits a "rude barbarian zeal for squaring the forms of speech into phonographic correspondence with their pronunciation."

One of the failings of humanity is to surround with sacredness that which by reason of its inherent weakness most needs protection. And it is quite probable if the beauties of the temple, orthography, had any existence outside the morbid imaginations of the worshippers there would be no cry of sacred beauties any more than in connection with the Adirondack forests. Of course, it is perfectly plain that there is nothing whatever beautiful about English orthography. It is hideous, violating every known law of aesthetic, without regularity, without symmetry, without proportion, without science or sense. The Greek professor of Yale, Mr. Hadley, says: "The defects of English spelling have to a great extent arisen from the mixture of different elements in the language. Neither the Anglo Saxon orthography nor the Norman French was distinguished for its regularity. But when the two were thrown together the result was a mass of confusion and anomaly, hardly to be paralleled, except, perhaps, in the spelling of the native Irish. The present system retains much of this chaotic character. It is perhaps, too firmly fixed for extensive changes, such as could alone effect a material improvement. But it is not creditable to the English name, nor accordant with the practical spirit of the English people. With a multitude of signs for the same sound, and a multitude of sounds for the same sign, it poorly fulfills the original and proper office of orthography, to indicate pronunciation; nor does it better fulfill the improper office, which some would assert for it, of a guide to etymology. It imposes a needless burden on the native learner. To a foreigner it seriously aggravates the difficulty of acquiring the language and thus restricts the influence of English literature on the world."

THE ENGLISH LANGUAGE.

BY PROF. HAY.

V.

While the Norman Kings ruled in England (1066 to 1154), literature in the two languages of the two peoples was composed, and some of it remains to our day; but at the close of this period, language began to be used that, though Saxon in its base, was altered in its forms. In the first century of Norman rule, many Saxon heiressees were married to Norman adventurers, and children began to grow up who were equally familiar with both tongues. The wife of the third Norman King, Henry I., was a Saxon princess. The late Lord Palmerston, prime minister of England, was descended from a Norman who married a daughter of one of the Saxon Earls, who resisted Duke William. Still, the Normans used very little the language of the Saxons. Prince William, son of Henry I., is said to have hated intensely the language of his mother's kin, and King Richard the I. is said to have been utterly ignorant of the language of his Saxon subjects.

The Norman language was known as the Romans (lingua Romana), and works written therein were called by the same name. Thus, in the latter portion of the 12th century, a history of the Norman settlement in France was written with the title of *Roman de France*; or, Romance of Rollo. The author of this, also wrote a work (which was a paraphrase of a Latin manuscript), entitled *Brut d'Angleterre*. This was a narrative poem, and from it and his other literary productions, *Maistre Wace*, its author, a native of Jersey, has achieved an enduring reputation, and sensibly affected the literature of later times. Shortly after the writing of *Brut d'Angleterre*, it was translated into the language of the common people by Layamon, who was a priest on Severnside. This is the first important work that shows the changes in the language caused by Norman influence. While Layamon gives fine examples of the alliterative style of earlier Saxon poetry, yet he evidently, also largely imitates the metre and rhymes of Wace. From Layamon's time to that of Edward the First, (1272 to 1307), the language

is known as semi-Saxon; and from then till Chaucer's time, (cir. 1400), we call it Old English. Early in the thirteenth century, King John lost his possessions in France, and this materially aided the formation of the English tongue; the great nobles no longer having foreign lordships to divert their attention from the people who lived on their lands in England; and from this time there was considerable literary activity in England. Monks wrote grange histories and treatises in Latin, and rhyming chronicles and metrical romances were written, both in Norman French, or rather English-French and semi-Saxon.

We shall, in the rest of this paper, give examples of the language of the common people from the time of the conquest, (1066) to the close of the semi-Saxon period, and we would add specimens of the Norman-French of the same period, if residence on a home-stand, in Western Kansas, did not preclude us from using books that are probably found in no library in the State, and in no private library west of the Mississippi, but which have in years past, intensely interested us.

A little while before the Norman times, Canute, the Danish King of England, is said to have been a poet, and the following verse is attributed to him:

Merie sungen the munches binnen Ely,
Tha Out ching ren thereby
Roweth canhtes nor the land
And hear we thes munches soeng.

The first Norman king promised the city of London that it should have the same rights as in Saxon times, and the following is the charter he gave them in the Saxon tongue:

William King gret William Biscop and Gosfreth Portrefan and all the Bwrran binmen London, Frenclise and Englise, frendlice. And to kithe ew that ic willa thaet get ben callra theera luga-weorde the git weoran on Edwardes daege, Kynges. And ic willa thaet aelc beo his fader yrf nune aefter his fader daege. And ic willa ge woliann thaet senig man (eow) senig wrang beode God eow gehealde.

The Anglo-Saxon Chronicle which for more than 250 years had been kept by the monks of Peterborough, (or as that cathedral was named from its wealth Goldenborough) closes abruptly in the year 1154, and a short passage from it of that date may serve as an illustration of what Saxon was just as it ceased to be spoken:

"On this yær the king Stephen ded, and bebyried there his wif and his sune weoran bebyried at Tauresfeld. That minstre hi makiden. Tha the king was ded that was the earl belonde se. And ne durste nan man him oðre bute god for the mielc eal of him. Tha he to Engleland come, tha he underfangen mid mielc wortsceap; and to king bleocad in Londone, on the Sunnen dæl before mid winterdæl.

In the charter of King William we have some roots of modern forms that are worth pointing out. In *Englice* and *Frenclise*, we have the Saxon form of our modern adjective termination *ish*, and in *frendlice* (friendly), we have the form of our suffix *ly*. The word *wortsceap*, (worship) from the Saxon chronicle shows all how *sc* stood for our sound of *sh*. *Mielc* is still used in Scotch and North of England dialects in the forms, *mickle* and *muckle* (much) and in some proper names, as *Micklewhite*. *Eie* (awe), *underfangen* (received), *bleocad* (consecrated). With that help most readers will be enabled to puzzle out the last words of the Saxon Chronicle.

Layamon's semi-Saxon was written within 80 years of the last passage. Notice its regular metre, also its Saxon alliterations. The story is about the games at King Arthur's coronation.

1. Tha the king igeten halde
2. And al his mon-weorde
3. Tha bugan out of burgh
4. Thelnes swithen balde.
5. Alle tha kinges
6. And heore here-thringes
7. Alle tha ða-copes
8. And alle tha clarcnes
9. Alle the eorles
10. And alle the boornes
11. Alle tha thelmes
12. Alle theswelnes
13. Feire iscrudde
14. Helde geond felde
15. Summe heo gunnen seruen
16. Summe heo gunnen urnen
17. Summe heo gunnen lepen
18. Summe heo gunnen scooten
19. Summe heo wræstleden, etc., etc.

The first four lines of this may be rendered: When the king eoten (igeten) had And all his multitude of men Then fled out of the town (burgh—burgh) The people very quickly.

Lines 13 and 14 may be translated: Held their way through the fields.

Gunnan means began, *aruen* is a verb made from the root of the noun *arrow*. Now the rest can be made out by the intelligent Kansas farmer. In the first line is a word that gives us a curious example of how words are formed and then the steps lost. Our word *had* is the past tense of *have*, and is derived from *hafa*. Layamon's word *hæfde* shows us how the derivation was performed.

Robert of Gloucester wrote a rhyming chronicle about the year 1280, but our space will not permit us to exemplify his style; but the following being from a version of the first Psalm about 50 years later (Old English) may be compared with our later translations:

"Beli blien that noht is gan
In the rede of wicked man

And in strete of stufal noht the stede
Ne eat in sepe of storme ungodde."

The "travels" of Sir John de Mandeville has the following account of Jerusalem (Anno 1356):

"After for to speak of Jerusalem the holy cytee schall understonde that it stant full aie betweene hilles and there be no rivers, ne welles but water cometh by condyte from Ebron."

John de Wycliffe, "the morning star of the reformation," gave his countrymen a translation of the Bible in their own tongue, and with a passage from this work, taken from the last chapter of Luke's gospel, we shall conclude this paper:

"And lo, tweyne of hom wenten in that day into a castel that was for Jerusalem: the space of sixty furlongs by name Enawa. And thei spoken togidre of alle these thinge that hadden bifalle. And it was don the while thei talkiden and soughten by hemself Jhesu hemself neighede and wente with hem."

From this last, it is easily seen that not much change is required to make modern English, but here we may point out one or two forms that, since Wycliffe's time, have changed.

We never put the participial termination *en* to *had* now. We see Wycliffe did, and it is added to the verb went, but it was a past tense termination then. The expressive verb *neighede*, we have now lost, and we must say for it *drew near*. Our next examples, though from old writers, will be of such purity that we may be tempted to say that we have reached the best of English.

\$1. \$1. \$1. \$1. \$1. \$1.

Pays for the FARMER for the balance of 1875.

Patrons of Husbandry.

CERTAIN NEEDED REFORMS AND CHANGES IN THE GRANGE ORGANIZATION.

I. The abolition of all degrees beyond the Fourth.

II. The making of all Fourth degree members eligible to any position in the Grange, from Gate-keeper to Master of the National Grange.

III. The removal of the National Grange Headquarters to St. Louis.

IV. The abolition of fifth degree Granges and substituting therefor the Business Council.

V. The reduction of the dispensation fee to one dollar, and reduction of dues to the simple cost of salaries and office expenses for National and State Grange Headquarters.

VI. The return of all accumulated funds in National Grange Treasury to subordinate Granges.

VII. The thorough organization of the business features of the Grange, by States and counties, as an absolute necessity for the perpetuity of the Order.

VIII. The County Council to constitute the business unit and the concentration of all surplus funds in the hands of the Council, where under the immediate supervision of those who contribute it, it may be applied to practical business enterprises.

The above is the Grange platform of the KANSAS FARMER. Upon the important question involved, we invite free and independent discussion. We distinctly require of correspondents, that they treat, in their communications, with courtesy and consideration, those from whom they may differ in opinion.—EDITOR FARMER.

LIST OF RECEIPTS AND DISBURSEMENTS.

Commencing May 17, and ending May 22, 1875, from the Relief Department of Patrons of Husbandry of Kansas.

CASH ON HAND \$ 259.12

RECEIPTS:

May 17—Received of J. Armstrong for corn and wheat 110.00

May 19—Received on the State of Kansas on freight 582.84

Total, \$901.46

DISBURSEMENTS:

May 17—Paid freight on potatoes to S. H. Maunier, Atchison to Hanover 12.80

" Paid freight on potatoes, R. P. Smith, Hiawatha, Brown county, 3.30

" Paid freight on car grain from California, 167.90

" Paid freight on seeds for H. W. Kelley per John C. Johnson, Harvey Co., 7.30

May 18—Paid Pleasant Ridge Grange, No. 241, Osage county, 10.00

" Paid freight on 2 bbls potatoes and one box from Vermont, 1.55

" Paid freight on 20 sacks potatoes from Emporia to Independence, Kan., 21.00

" Paid freight on 4 bbls potatoes, J. W. Hess, 8.65

" Paid freight on car, W. H. Edwards, Wilson Co., 125.50

" Paid expressage and for telegraphing, 1.35

May 19—Paid freight on 9 bbls for Jewell county, 11.90

" Paid for postal orders, .15

" Paid freight on potatoes to James Faulkner of Allen county, 8.80

" Paid telegraphing, 1.00

May 21—Cash paid James Vick for garden seeds, 25.00

" Paid freight on potatoes, Jesse Bell, of Ottawa, C. B. & Q., from Afton, Iowa to Wichita, Kansas, 90.95

" Paid freight on car 940, H. & St. Jo., from Emporia Junction to Council Grove, 15.00

" Paid for car corn, 190, C. B. & Q., at Afton, Iowa, 442 bushels @ 63 cents, 278.46

May 22—Paid Wm. Roark, of Cherokee county, 5.00

" Paid for postage, 3.25

" Paid freight on car 190, from Afton, Iowa, 80.55

Total, \$981.66

Cash balance on hand, 19.90

GOODS RECEIVED.

May 17—One box clothing and 2 bbls potatoes (frozen).

" One box mds for Alfred Taylor, Grasshopper Falls, Kansas.

" One sack clothing.

" One sack barley, wheat, and corn from California.

May 18—One bbl potatoes for Jesse Bell, Ottawa.

" One car corn, 190, C. B. & Q., 442 bushels.

GOODS DISBURSED.

May 17—One box clothing and one sack, delivered to J. Armstrong.

" One box mds sent to Alfred Taylor for D. B. German, Grasshopper Falls.

May 18—118 sacks barley sent to St. Louis for sale.

" One bbl potatoes for Jesse Bell, sent to Ottawa, Kan.

May 22—120 bushels corn sent G. W. Goss, Lawrence, Kansas.

" Balance of car load, 838 bushels, sent to F. H. Dumbauld, Parsons, for distribution.

A final report from this department, will be published after the next meeting of the Executive Committee, Kansas State Grange, P. of H., in July, 1875.

JNO. G. OTIS,

Kansas State Agent, P. of H.

EDITOR FARMER.—We have received several letters lately, asking for copies of Constitution and Proceedings of the State Grange. Now let me say, that if the Secretaries of Subordinate Granges will send us the P. O. address of their Grange, as requested by the Executive Committee, we could then distribute any circulars and papers in a proper manner. Any Subordinate Grange not receiving the Bulletin will understand why they have not received it. We would be pleased to have every Grange in the first district send us a postal card with their proper P. O. address, so we can make up a correct list; the members of the Executive Committee in each district also make the same request.

W. P. POPPNER.

From the proceedings of the Executive Committee Kansas State Grange we find the following published in the Bulletin of the Committee:

RULINGS.

WHEREAS, There seems to be a misunderstanding about the meaning of a ruling of the Executive Committee, made February 26th, 1875 in relation to delinquent members, does Therefore, the Executive Committee, in the explanation rule that the clause which reads as follows: "Provided, no Grange shall be entitled to the annual P. W., unless such Grange is square on the books of the Secretary of the State Grange," be amended by adding, after December 31st, 1875.

DISTRICT GRANGE RULINGS.

Ruled, That in District Granges, Masters, Past Masters and their wives who are matrons and delegates, are equally entitled to vote and enjoy equal rights and privileges, under the provisions of the National and State constitutions, and all pay fees and dues alike; each member paying his or her own dues. The subordinate Grange being in no wise responsible for such dues.

Ordered, That blank applications for dispensations to establish District or Pomona Granges be printed, and placed in the hands of Secretary of State Grange, to be furnished to those properly entitled on application.

Ruled, That the form of application recommended by the Executive Committee, and published in the proceedings of the State Grange be the form used, except that the sentence which reads, "all having received the fifth degree," shall read, "all being entitled to receive the fifth degree."

Ruled, That the application accompanied by the proper credentials, be first sent to the proper officer of the State Grange, or Deputy; by those wishing to organize a District Grange, and such officers shall forward the application to the Secretary of the State Grange, who, when the dispensation has been granted by the Master will forward the Dispensation, Ritual and other needed papers to the officer, or deputy making the application. The constitution and by-laws recommended for Pomona Granges.

Ruled, That under our present constitution, none but delegates to the State Grange have the right to vote in the State Grange. That Masters and their wives, who are Matrons, are entitled to the fifth degree, and are eligible to office. Past Masters and their wives, who are Matrons, are not eligible to be elected delegates to the State Grange under the National Constitution.

RESOLUTIONS OF CAPITOL GRANGE.

WHEREAS, There are certain persons in this community, who, from thoughtlessness or ignorance of the incalculable injury they are doing, are almost daily shooting birds in direct violation of law, birds that are destroying large numbers of grasshoppers and other insects, which at this time are threatening to destroy almost entirely the crops in which many have invested their last dollar and many days of hard work, and in which is their only hope for sustenance and that of their families; and deeming it of the highest importance, that some united and energetic action be taken to remove an evil which may assist so greatly in bringing ruin upon our State and starvation to thousands of our fellow citizens, therefore, be it

Resolved, by Capitol Grange, No. 16, That we pledge ourselves, individually and collectively, to do all in our power to prosecute to the full extent of the law, all persons found hunting any of the birds that are protected by law.

Resolved, That a copy of the above be sent to the city papers for publication. Adopted May 8, 1875.

J. G. OTIS, Master.

ELLA SPENCER, Secretary.

EDITOR FARMER.—I have completed pilgrimage No. 1, to prove and exemplify, the benefits and blessings of the Grange, and now desire to say to you, and through you, to the readers of the FARMER, that the Order of Patrons of Husbandry has already wrought a wonderful reform among the masses, and will in the near future, in spite of political charlatans, inaugurate the millennium. To the farmers and workers who produce everything and feed the world, we must look for the reign of Christ on earth, so much preached about. My tour through the Hawkeye State, established to my satisfaction, that railroads are a good thing when run in the interest of the people, but a very unprofitable thing when we make them the object of worship. For my part, I'd rather go about than indulge in railroad idolatry. It also established that the people who have it in that state, would rather sell on time, with only two chances in three of getting pay, than to give what then have away without any prospect of ever getting an equivalent in whole or in part. But, I found that the purchase on the time plan to relieve the destitute was very unpopular at all relief headquarters from Topeka to Des Moines. And now from fear of taking more space than I am entitled to, I will close by thanking the generous people of Iowa for their kindness to me personally, and more particularly for the interest which they have taken in the welfare and prosperity of the people of my adopted State.

MOREMACH.

The walking correspondent.

Glen Burn, May 18, 1875.

The KANSAS FARMER will be sent the balance of the year 1875, for \$1.00.

RESOLUTIONS OF SHANNON HILL GRANGE.

At a regular meeting of Shannon Hill Grange, held May 5, 1875, the following preamble and resolutions were presented and unanimously adopted:

WHEREAS, The crops of the country are being devastated by swarms of young grasshoppers, and,

WHEREAS, the birds are the great destroyers of these insects, and seem to be the farmers' best friends in destroying these pests, therefore, be it

Resolved, By the members of the Shannon Hill Grange, No. 750, Atchison county, Kansas, that we will not allow any one to kill any bird on any farm within the jurisdiction of this Grange, and we hereby give notice, that any person found killing birds on our premises will be prosecuted to the full extent of the law.

Resolved, That a copy of this preamble and resolutions be published in our county papers and in the KANSAS FARMER.

By order of Grange.

HERSCHEL BERRY, Secretary.

At a meeting of the Farmland Grange, P. of H., held April 10th, 1875, the following resolutions were adopted:

WHEREAS, the subject of the organization of a County Grange has been submitted to the Subordinate Granges for their action, therefore,

Resolved, That we are opposed to such organization as proposed, as contrary to the best interests of the Order; and that our delegates be, and are hereby instructed to oppose it, in whatever form it may arise, by their votes, in the council; and furthermore,

Resolved, That we believe in unity and equality in the Grange, and that 4th degree members should be eligible to any position in the Order, from subordinate to national grange, and,

Resolved, That a copy of these resolutions be furnished the KANSAS FARMER, Spirit of Kansas and Standard of Reform for publication.

ELISHA PARKER, Secretary.

The Farm Journal publishes a review of the business done by Patrons through their agencies during the past year. The purchase of farm implements aggregates \$255,000, on which there has been a saving of \$60,500 and prices are 21 per cent. less than they were two years ago; \$445,612 worth of family supplies have been bought, at a saving of \$80,210; and \$107,000 worth of lumber, at a saving of \$16,050. The sales of farm produce through grange agents amounted to \$3,284,000 and of stock to \$1,021,100, the saving on which is \$478,284.

Prairie Rose Grange reports purchases made through the Grange agencies of \$3,774.90, at a saving of \$749.16; and sales of \$2,160.40, at a saving of \$218.70. Total business transacted, \$4,935.80, saving \$887.80, or 18 per cent.

The Executive Committee at its late session provided for raising a business capital for the State Agency. In substance, the plan is to ask for a stock subscription from Granges and individual Patrons.

A Grange Fire Insurance Company, carrying risks to the amount of \$60,000, has begun operations in Jackson and Clinton counties.

The grange store at Albia is stated to be doing a large and prosperous business.

Arrangements have been made for building a grange hall at Plymouth.

A grange purchasing agency is to be established at Story.

There are fifty-three grange elevators in the State.

A brother offers a special premium of \$20 to the boys of the Patrons of Husbandry, from the age of twelve to sixteen years, for the best acre of corn, and \$10 for the second best acre. All of the work to be done by the competitors—preparing the land, cultivating and gathering, and the yield to be certified to by two or more disinterested persons, and affidavit as to yield to accompany statement.

Topisaw Grange offers good premiums for farm and garden productions, with the object of inducing farmers to diversify their crops.

The necessity of growing at home what they must eat is being agitated by the Order in nearly all the Southern States, especially in Mississippi and Georgia.

Copiah Grange has passed resolutions urging the National and State Granges to provide homes for the "comfort and education of the destitute orphans of our Order."

The State Grange has appointed a committee to report upon the feasibility of establishing a college for the benefit of Patrons.

\$1. \$1. \$1. \$1. \$1. \$1.

Pays for the FARMER for the balance of 1875.

ELISA SPENCER, Secretary.

GRANGE REPORT.

The resolution passed by Winham County Council of Patrons, published this week, we believe expresses the views of a majority of the Patrons of the country on the questions of degrees. This question has been extensively agitated among the Western Granges for some time, and they have almost unanimously joined in protesting against the fifth degree. Foremost among those demanding this reform is the KANSAS FARMER, a bold, free, independent people's paper. We are glad to see the question taken up by Vermont Patrons, and hope the decided action will be taken by the National Grange at its next session.

We can never expect perfection here below, it is true, but we can expect constant progression, either toward the right or the wrong. The Grange is of all institutions the one of which this progression is expected, as "reform" and "improvement" are its watch-words, and we expect to see improvements in its construction and manner of working from time to time which shall keep it at the head of the progressive institutions of this progressive age.—Vermont Farmer.

WHEAT IOWA SAVED.—The Executive Committee of the Iowa State Grange, at its last session, reported that the saving in the purchase of farm implements by members of the Order, during the year past, was \$80,740; on family supplies, \$80,210; on lumber, \$16,050; that the amount gained in selling through the authorized agents of the Order, was, on farm produce, \$856,740; stock, \$123,544. The Order owns 63 elevators, and the grain to farmers on these was at least 7 per cent.

CARDS, Bill Heads, Letter Heads, Statements etc., neatly and cheaply printed at the KANSAS FARMER Book and Job Printing Office, Topeka, Kansas.

REINSTEADLER

FARMERS! If you want PLOWS AND FARM MACHINERY at reduced rates, send for circular to H. Reinsteader, wholesale dealer in Farming Implements, 6 N. Main Street, St. Louis, Mo.

St. Louis, Mo.

NICHOLS, SHEPARD & CO'S.

"VIBRATOR" THRESHER.

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

THRESHING MACHINE

GRAIN RAISERS REFUSE to submit to the wasteful and imperfect work of other threshers, when posted on the great superiority of this one, for saving grain, saving time, and doing fast, thorough and economical work.

THRESHERMEN FIND it highly advantageous to run a machine that has no "Pickers," "Flickers," "Aprons," that handles Damp Grain, Long Straw, Heading, Flax, Timothy, Millet, and all such difficult grain and seeds, with ENTIRE EASE AND EFFECTIVENESS. Clean to perfection; saves the farmer his thresh bill by extra saving of grain; makes no "Littering," requires LESS THAN ONE HALF the usual belts, rollers, journals, and gears; easier managed; less repairs; one grain raiser prefers to employ and wait for, even at advanced prices, while other machines are "out of jobs."

Four sizes made with 6, 8, 10 and 12 horse "mounted" Powers, also a specialty of Separators "alone," expressly for STEAM POWER, and to match other Horse Powers.

If interested in grain raising, or threshing, write for Illustrated Circulars (sent free) with full particulars of sizes, styles, prices, terms, etc.

NICHOLS SHEPARD & CO.

Battle Creek, Michigan.

ECONOMY IN CORN CULTIVATION

Conservators wanted where we have no Agents. SEND FOR CIRCULARS.

THOMAS SMOOTHING HARROW

ADDRESS ALL ORDERS TO W. H. BANKS & CO., FARM MACHINERY AND SEEDS, HARDWARE SPECIALTIES, 24 & 26 SOUTH CANAL ST., CHICAGO.

FARM GATE HANGER, or the Barn Door Hanger modified for use, on the Farm Gate. A durable, convenient and cheap Gate Hanger. Sold by hardware trade generally. J. W. NOYES, Chicago and New York, 26 Chamber Street.

CAKON'S SEEDSOWER

Sows all kinds of GRAIN AND GRASS SEED. Address all orders to W. H. BANKS & CO., Sole Agents for the Northwest, 24 & 26 So. Canal St., CHICAGO.

CONTRACTS

OTTAWA CO., May 17.—It rains here about three times a week; everything growing very fast. Grasshoppers are doing some damage to garden and field crops in the valleys, but none on uplands. Large area of corn planted. All expect to raise a big crop of everything. Small grain of a all kinds looks well.

A. R. BARDICK.

Hedge Plants for sale, 3 miles Southwest on Burlingame road, by H. W. Owens.

Literary and Domestic.

EDITED BY MRS. M. W. HUDSON.

HONEST JOHN.

New directors were appointed, other influences were brought to bear, and so Katie failed to secure the district school. Teachers were many schools were few. Katie's mother was a widow, and poor, and she of all the applicants for the situation needed it more than any other. It happened then that Katie was compelled to sew. Bread and fuel would not come in at the widow's door unearned, nor would the widow's measure of meal replenish itself. The times were hard and work scarce, and pay small, and yet Katie's heart was full of sunshine, for it was full of love, and the shadow cast by poverty over their humble home was not deep enough to cloud her bright life.

But though the heart was brave and strong yet the frail little body shuddered as the wind whistled over it, and the painful cough racked it, and the hectic spot on the cheek told a tale of its own.

"Stitching herself to death," said the old doctor, bluntly, when consulted.

"Is there any remedy?"

"Yes. Put away the work. Wash dishes, sweep, bake, run in and out. That is all."

A cheap prescription, the widow thought, if Katie could only follow it.

And why might she not? Katie questioned eagerly. Work her best she couldn't earn over four dollars a week, and board herself out of that. Mrs. Plum wanted a girl to do second work, she would pay three dollars a week and board.

So it was settled, and Katie took her position in Mrs. Plum's household, as hired servant.

"It won't always be so," said she, hopefully, "Walter will soon be settled, and then I shall have a home of my own. Oh, I shall be so happy!"

Poor little Katie.

Walter came one day to call on Lawyer Plum. He wanted to make arrangements with him in regard to entering his office. Mr. Plum brought him home to dinner, in company with one of Walter's mates, an aristocratic young fellow, with plenty of blue blood in his veins, of yellow gold in his pocket, but a very small share of common sense in his head.

Katie turned scarlet as she came forward to take the young man's order, and met Walter's glance; then she saw the first look of glad pleasure fade from his face, and an uncertain, shameful expression take its place, she grew white as the china plate in her hand. He did not speak to her.

Then it was that proud young heart that asserted itself. She had not done anything of which she had need to be ashamed! She had always had to work for her living. He knew that! One honest calling was as good as another. What was there in a woman's work, the work that two-thirds of the women throughout the world must follow, to degrade her! She would not be put down. If the homes of the nation were the nation's sanctuaries, then the hands that helped to build them, be they kneeling or not, were sanctified.

A teacher's position was not so dignified as a housekeeper's, and infinitely more ennobling was her work now than it had been when stitching puffs and ruffles from day's end to day's end again, week in and week out.

And yet there was a quivering about the corners of the girl's mouth, and a deeply grieved expression in the blue eyes.

That night she received a letter from Walter.

"How could you, Katie?" he wrote. "A common servant to the man who is to be my business partner? Go home, Katie, and I will come and see you. I couldn't speak to you there."

The little hand clutched the letter fiercely, then deliberately dropped it into the glowing grate.

"It is all over between us," she said. "I will not go home. He may think as he pleases. I shall be true to what I think is right."

That night Walter said to John: "I am miserable. Everything has gone wrong."

"Why, aren't you going in with Plum?"

"Oh, that's all right. It's about Katie."

"About Katie?"

"I found her at work in Plum's kitchen."

"I know. The brave little girl!"

"But, John, the disgrace! The injury to my business. The world will say: Walter Howard's wife was a hired girl."

"Walter!" cried John in indignant surprise. "My brother Walter!"

"I can't help it, John. That's the way I feel about it."

"I hope you did not let Katie see it!"

"I—"

"Well, what?"

"I didn't speak to Katie at all. Don't look so, John, I couldn't. Augustus Ludlow, the most aristocratic fellow in the world, was with me, and I know I am a coward, but I couldn't say, 'how do you do, Katie?' I've raved about her a hundred times to him, and he would have been sure to know."

"Walter Howard, I'm ashamed of you! If another had told me this, I would not have believed it. Why, your mother, boy, has done housework all her life. Wouldn't you speak to your own mother—to your own sister? I am a working man, too. It wasn't my ambition. I had a different one from that. But I buried my dream—said it away forever, Walter, that you might live the life you longed for. And yet another, and a holier dream came to me."

Here John's voice grew husky, and his eyes filled with unshed tears.

"Yes, another dream, Walter, for when you came to me and said, 'I love her, she loves me,' then it was I laid that away forever, too. But the sacrifice, I have made, the first one as well as the last one was useless. You have learned to undervalue working people as a result of the first one, and this has learned you to treat the only woman I ever loved, or ever could love, cruelly."

"You, John, you! You love little Katie Brown! Am I so blind? Forgive me, John, forgive me. I see it all now. I came home and in my boyish selfishness took her away from you. Poor old John, dear, old great-hearted John! I have been cruel. But don't hate me, I didn't know it. I never dreamed it. What a wretch I was to come to you with my plans, upsetting all of your own; to come to you with my love story, torturing your great brotherly heart with my selfishness."

"You blame yourself too severely, Walter. It is not this that has hurt me, but your unkindness to that poor child, whose least smile would have been to me worth more than gold."

"I'll go to her at once. I'll beg her forgiveness. She'll forget my cruelty. And if she's willing, John, I'll make her mine at once. And yet, John, I scarcely dare go. Somehow I'm a coward. I'm losing confidence in myself. Would you mind telling her, John? Would it hurt you to say these words to her?"

John looked up eagerly, his face growing white and red.

"What an excitable old fellow he is," said Walter to himself, watching him; "he's so glad to make it all right between Katie and me."

In his farm suit, with no pretensions of finery, John walked over to the village.

He called at Lawyer Plum's for Katie. Katie came in, her fair face blushing, and he laid her hands in his own.

He looked down upon her kindly and said gravely: "I come from Walter Katie. He is very sorry he treated you so, and begs through me, your forgiveness."

"I am very glad to forgive him," said Katie quickly.

John sighed, for had not a strange, wild hope been to him that through Walter's and Katie's disagreement, happiness might come to him? He thrust the traitorous thought aside but Katie saw the hopeful look in his eyes, and read aright the meaning of the bright spot that burned on his cheek.

"And the wedding may be soon?"

"Walter's wedding and mine?"

"Yes."

"It will never be, John," said Katie, very firmly.

"Oh, Katie!"

"No, never! I must respect the man that I marry. Indeed, I cannot love a man that I do not respect, so that's the end of it—not another word."

"It will break the boy's heart."

"You don't believe that, John. If it was you, John—"

Then Katie stammered, hesitated, and the old doctor came in and took her to her room, the great longing to say what was in his heart, but kept back by his sense of its hopelessness, and still further, by his honest purpose to be true to Walter and the cause he had trusted him with.

John said to Katie, Don't trust poor Walter aside too hastily. His years in college, his associations, have given him a different view of life. But yet he is manly and generous. Why, I have known him all his life, and I know that the woman who marries Walter will never regret her choice. Let me take back to him the word when I may be.

"This is unlike you, John. You have my answer."

"You can't mean it, Katie?"

"Yes, John, I shall never be your brother's wife."

"She loves some one else," said Walter, when told Katie's words.

"No, no," said John, unwilling to believe in this new misfortune. "Go, like a man, Walter, and ask the girl's forgiveness for your blunder."

Walter smiled wisely to himself and went as John directed, to call on Katie.

"It is no use, Walter. I told John so. I shall never marry any one," she protested, earnestly.

"Katie, now that I know that you do not love me, I am not going to ask you to marry me. But tell me the name of that other more fortunate one, for you must admit that there is another. You see I am not deceived, however much John may be."

Katie held her hands to her face, which was shining scarlet between her fingers.

"May I guess his name, Katie?"

"No!" she cried, angrily.

"Is it—"

"Don't you dare! I won't hear it!" and without another word she ran away.

Walter went home, whistling softly to himself, and said, as he came up to John, who was hoeing, "I am a miserably selfish fellow. I can't help regretting that I have lost her, even when I know that it will make you so happy."

"Me happy?" cried John. "What do you mean?"

"Only this, John, old boy: Katie loves you. Don't grow so white, man alive! It is not such a terrible thing, that you need grow frightened over it."

"It is too much happiness," murmured John.

MAKING THE BEST OF WASH DAY.

Washing day is not poetical except in the old comic song, and its regular appearance in our farm kitchen "so early Monday morning" calls for an unusual amount of patience, courage and physical strength.

The quiet Sunday rest of mind and body leaves us in excellent trim for this demand, and I have always admired the shrewdness of our Yankee foremothers in dedicating Monday to this special branch of domestic service. Who can tell us whether the habit originated with them, or how venerable may be the date of this beginning?

How that may be, the habit became so fixed that a Yankee woman felt sure that Monday was made for washing as Sunday for preaching; and over old-fashioned washtubs there was generally a free and easy contenance of such Sunday topics as pertained to the gowns and bonnets that had the day before brightened the old "meetin' house." A little cheerful sociability or harmless gossip helps wonderfully to lighten the burdens of a hard day's work.

Even a solitary wash day is not without its enjoyment, for while the hands are busy the mind is free to roam the world over, and we must learn to make the most of this pleasant privilege.

It would be nonsense to claim inspiration from soap-suds and all the rest of it, but true it is that with pen or pencil I never can do justice to the thoughts that come crowding and vanishing through the foam and steam of this homely toil. They are no more to be caught and fixed than are the host of soap-bubbles that shine and shiver and vanish forever.

And what famous fancy trips I take, in worlds known and unknown, and weave my web of life again, bright and strong, from childhood onward.

Old memories come warming and carry me so far away that I cannot remember whether the clothes have boiled the exact half hour, or more or less.

The day need not be full of discomfort to anybody if things are properly managed. Of course there ought to be a separate wash room, but generally there is not, and the boiler must go on the cook stove.

The woman who washes Monday is the woman who bakes generously on Saturday, and no more worry about food for two or three days.

I hope she also puts the soiled clothes to soak in good strong suds, to which may be added a little ammonia or borax if they are very dirty. It is not much trouble to do this when the habit is formed, and is a very great help in the washing.

I suppose the next direction (or exhortation) ought to be, "Get up very early and nearly finish washing before breakfast." But that would be preaching so much better than I practice, it will be better to begin again and say, "Take time to dress as neatly this morning as any other, or perhaps a little more so."

There, that is my secret for making Monday "tolerable" instead of a day to be dreaded. If a woman flings herself into a dirty, ragged dress, the oldest boots she can find, and leaves her hair all in a muss, it is pretty certain that her temper will soon be in a snarl, and all her affairs as unlovely as herself. My little friend may laugh at the notion of a neat and suitable dress for washing, but I only ask her to try it a few times, and see if it is not as great a help in its way as a patent wringer, or any other patent. To be suitable the dress should be rather short, and so should be all the skirts for kitchen duty.

Now if these two things are observed, putting the clothes to soak and dressing neatly in the morning, the day will not be so very dismal, and when the household linen spreads its white wings on the clothes line, you will be just tired enough to enjoy the low rocking chair and a good two hours of reading. That is generally my own rich reward after hard work; but when the babies were small the resting times were given more to them.

Yet I have always managed to have an oasis in the desert of washing day. And I hope every farmer's wife has a washing machine or a good husband or a good son to help her over the hard lifts of this hard day, and if I say no more about the actual process of washing it is because every woman has her own "way" that seems to her best and fixed as the ancient law of the Medes and Persians. One little convenience I learned from Faith Rochester in the American Agriculturalist and it may be new to some other woman. Carry the clothespins in a bag that has a long belt or band to tie around the waist. This has saved me a great many steps in hanging out and taking in clothes, has been worth more than one year's subscription to a newspaper.—*Social Press.*

CHILDREN'S CLOTHES.

Every mother of moderate means is some times worried by conflicting duties; the supposed duty of dressing her children fashionably and elaborately, and the real duty of providing not only for their clothes and appearance, but also for the health of their bodies and the cultivation of their minds.

In these days of sewing machines and cheap fabrics, children's clothes should, apparently, be a matter of small consequence—yet how often is a delicate mother seen working day after day at some intricate, braiding or delicate embroidery designed to adorn the little pet of the household—at the cost, not only of time and health to herself but of happiness to the child. We do not mean to condemn all ornament or assert that ugliness is a virtue—but we honestly think that many an hour spent in first making and then ironing and doing up the perfectly useless flounces and puffs of an elaborate little dress might be better spent in giving to the child that sympathy which a mother alone possesses—only a mother can give. A healthy child must spoil its clothes; the activity, the restlessness, the curiosity of the little one to explore the hidden treasures in the coal bin; the desire for the happiness concealed in mud-cakes, forbid the quiet discretion necessary to the preservation of fine clothes. And a child whose desire for knowledge and amusement is restricted by thoughts of her dress is rarely happy. A mother, too, can rarely avoid an amount of

anxiety—ridiculous were it not so real—lest her darling's costly dress should be soiled or torn, and at best looks forward with a weary dread to next week's washing day. Much of this worry—and worry kills many a feeble woman—might be easily avoided by a resolute adherence to a fixed principle—the dress is made for the child's health and convenience, and not the child for the dress. Simple bit calicos, of pretty, neat, figures, carefully made, are, we think, the best dresses for children. Gored patterns are easily cut, readily fit, and no trouble to do up. They have besides the advantage—no small one in large families—of being passed with but little alteration from one child to another, and may be lengthened by a Spanish flounce. A white "best" dress may be made of Victoria lawn or pique—the latter lasts indefinitely—and here we do not object to a ruffle or two on the skirt, or on pique a pretty simple braided pattern; but every day dresses should be made as simple as possible. Elaborate dress requires time, care and constant attention, and a child who is beautifully dressed can scarcely be carried off without disturbing her fiery nor can she move without thinking of it. Cleanliness and neatness are the two necessities in children's dress. How many hours now devoted to useless trimming and ornament might by a thoughtful mother be made into happy times, which in after years would be remembered by the child as the purest of all earthly delights—the realization of that strongest of human affections—a mother's love.

"A mother's kiss," said Benjamin West, "made me a painter;" and another great artist has said the same thing. A mother's minutes of sympathy in childish pursuits, a mother's hours spent in moulding the character of her children, are far more powerful for good hereafter, than days passed in contriving "outward adorning," for the bodies of her little ones, which indeed soon perish and "leave not a trace behind," except in the remembrance of gratified vanity and ostentatious display.—*Inter-Ocean.*

RECIPES.

VERMIN.—If you are troubled with ants, water bugs, cockroaches, or insects of any description, powdered borax laid in their haunts will dismiss them to a new ranging ground. It is also desirable to sift it into the joints of your bedsteads, in houses or rooms, which have become infested with these most disgusting of insects; grease, or lard, is just as efficacious as coal oil but borax is much more easily applied.

MOTHS IN CARPETS.—A sure method to remove the pests is to pour strong alum water on the floor to the distance of half a yard around the edges before laying the carpets. Then once or twice during the season sprinkle dry salt over the carpet before sweeping. Insects do not like salt, and sufficient adheres to the carpet to prevent their lighting upon it.

TOMATO SOUP.—One pint canned tomatoes, half pint water—stew fifteen minutes; add pepper, salt, and a little butter. Then stir in two tablespoonfuls of pulverized cracker (mixed with a little milk). Let this boil once, then add one pint of milk. Boil the whole three minutes then serve hot with oyster crackers or toasted bread.—*N. E. Farmer.*

MATCH MATS.—These can be made of ordinary sand paper cut in circular and octagonal shapes, fastened upon pasteboard and bound with bright-colored braids, a ring attached to each and the whole hung near the match-safe for use whenever a match is lighted. The unsightly marks that disfigure many walls, may by this inexpensive and simple arrangement be entirely prevented. There should be one in every room in the house.

OATMEAL CRISPS.—To one quart of Scotch oatmeal (the ordinary grade) add two level spoonfuls of sugar and three gills of boiling hot water, or just enough to wet without saturating the meal. Then take out a level spoonful lightly and as flat as you can, and lay it on a baking tin, having it no more than one-fourth of an inch thick. When the pan is filled in this way, put it in to a moderate oven and bake about half an hour or until the water is dried out and the crisp retains its form when handled. Be very careful not to scorch it, nor make it much more than a barely perceptible brown. When done, put away where they will be dry, and serve like crackers. They are brittle and tender, and require to be handled very carefully, or they will crumble to pieces. They are nutty and wholesome, and when nicely made soon find their way into favor. They eat nicely with sweet stewed fruits, and with raisins, or dates, or figs—especially the latter. They make an admirable travelers lunch.

SAUCE FOR PUDDING.—One half cup of butter, one cup of sugar, the white of one egg, beat all together. Have ready a pint or more of boiling water, stir in the above and let boil a half a minute.

ORANGE, PEACH OR FRUIT PUDDING.—Cut up five good, sweet, juicy oranges, or what is better, some nice peaches; of course they must be free from seeds or stones and the skins be removed; put them in a very large pudding dish; pour over them one-half a coffee cup of white sugar. Now set a pail containing a pint of milk into a kettle with a little boiling water. Stir together the yolks of two eggs, one-half a cup of sugar, two tablespoonfuls of corn starch and a little cold milk; when your milk boils in your pail stir this in and add a little salt, let this thicken, pour this over your peaches. Now beat the whites of two eggs to a stiff froth, add a tablespoonful of pulverized sugar, pour over your pudding and set in a hot oven just long enough to brown. Eat cold.

ONE DOLLAR! ONE DOLLAR!!

Tell your friends and neighbors that One Dollar will get them the best farm and family journal in the country the balance of 1875.

\$.1. \$.1. \$.1. \$.1. \$.1. \$.1.

Pays for the FARMER for the balance of 1875

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

ADVERTISEMENTS.

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 Miners, to 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 pianos and organs.

Boarding ranges from \$3.75 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. P. Poppenoe, F. H. Dumbauld, J. B. Shaeffer, Executive Committee; A. Washburne, 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 of the Grange, 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.....\$1.00

which amount is paid in advance.

The Patrons Association rates are,

Membership fee.....\$1.50

On policy of \$1,000, first year's premium.....\$5.00

Cents on each \$100.....\$5.00

Total cash paid.....\$4.00

A policy is then issued for 3 years and 75 cents taken for the remaining 2 years.....\$5.00

Total cost of insurance for 3 years.....\$9.00

The premium note is liable to assessment at any time to pay expenses and losses. On a policy of \$500 the cost is as follows:

Membership fee.....\$1.50

Premium for first year.....\$1.25

Total cash payment.....\$2.75

Note for remaining two years.....\$5.00

Total cost for three years.....\$5.95

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.

500,000 GRAPE VINES FOR SALE.

CHEAPER than any where else. Concord—1 year, \$30 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, Bunchman, Norton, Herbesmont, Catawba, Croton, Hartford and all other varieties cheaper than any where. Also all small Fruit Plants. Address Dr. H. SCHROEDER, Bloomington, Ills.

PLASKET'S BALDWIN CITY NURSERY, 7th YEAR.

800,000 Two year Hedge, nice even size, in quantities of

June 2, 1875.

SYNOPSIS OF THE STRAY LAW.

How to Post a Stray, the Fees, Fines and Penalties for not Posting.

Broken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful inclosure of the taker up.

No persons, except citizens and householders can take up a stray.

If an animal liable to be taken, shall come upon the premises of any person, and he fails for ten days after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in a many places in the township, giving a correct description of such stray.

If such stray is not proven up at the expiration of ten days the taker up shall go before any Justice of the Peace of the township, and file an affidavit, stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised for ten days, that the marks and brands have not been altered, and he shall give a full description of the same, and its cash value. He shall also give a bond to the State in double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up, (ten days after posting) make out a return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than ten dollars it shall be advertised in the Kansas Farmer, in three consecutive numbers.

The owner of any stray may within twelve months from the time of taking up prove the same by evidence before any Justice of the Peace, or by affidavit, and if he fails to do so, the Justice of the Peace, or the Justice before whom proof will be offered. The stray shall be sold to the owner, on the order of the Justice, and upon the payment of all charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to be served by the taker up, and appraisers, or two of them shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine cost of keeping and the benefit the taker up may have had, and report the same on their appraisal.

In all cases where the title vests in the taker up, he shall pay into the County Treasury, after deducting all costs of taking up, posting and taking care of, one half of the remainder of the value of the stray.

Any person who shall sell or dispose of a stray, or take the same out of the state before the title shall have vested in him shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Fees as follows:

To take up, for each horse, mule, or ass, \$5.00

To take up, for each head of cattle, \$5.00

To take up, for each head of swine, \$5.00

To take up, for each head of sheep, \$5.00

To take up, for each head of goats, \$5.00

To take up, for each head of deer, \$5.00

To take up, for each head of wild animals, \$5.00

To take up, for each head of birds, \$5.00

To take up, for each head of insects, \$5.00

To take up, for each head of reptiles, \$5.00

To take up, for each head of fish, \$5.00

To take up, for each head of mollusks, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

To take up, for each head of stones, \$5.00

To take up, for each head of woods, \$5.00

To take up, for each head of plants, \$5.00

To take up, for each head of minerals, \$5.00

To take up, for each head of fossils, \$5.00

To take up, for each head of metals, \$5.00

THE KANSAS FARMER.

175



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, Boil 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.

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

Breeders' Directory.

BYRON BREWER, Glenn Johnson county, Kansas, breeder of Friesian, Friesian, and a few other breeds of cattle, and warranted first-class. Correspondence solicited.

J. M. GAYLORD, Paola, Kansas, breeder of Buff and Red, and a few other breeds of cattle, and warranted first-class. Correspondence solicited.

J. MILLER, Beecher, Illinois, breeder and importer of HERFORD CATTLE and Cotswold Sheep. Correspondence solicited.

KERR TAYLOR & CO., Commission Dealers in Cattle, Hogs and Sheep, P. O. address, East Buffalo, New York. All stock consigned to our care will receive prompt attention.

W. M. TILTON, Toga, Maine, breeder of Holstein and Jersey Cattle, Cotswold Sheep, and driving horses of fashionable blood.

THEODORE BATES, Wellington, Lafayette county, Mo., (rail road station, Lexington), breeder of Short-Horn Cattle, also Cotswold and Southdown sheep. Stock for sale.

J. DUNLAP, Meadow Lawn, near Galesburg, Choice young bulls for sale. Send for Catalogue.

THOR SMITH, Cheyenne, Wyoming, breeder of Short-Horn Cattle and Cotswold Sheep. Has choice young bulls for sale.

G. M. MAXON, "Riverside Farm," Schenectady, N. Y., breeder of Short-Horn Cattle and Berkshire Swine. Stock for sale.

THOMAS KIRK, Washington, O. H., Ohio, breeder of Short-Horn Cattle, the most fashionable strains. Stock for sale. Catalogues furnished on application.

H. N. MOORE, "Botan Valley Place," Red Oak, Iowa, breeder of Short-Horn Cattle, Berkshire and Magic Hogs. None but thoroughbred kept on the farm.

W. Short-Horn Cattle of unimpeachable pedigree—seven years old, the sort suitable for the show ring and shambles.

H. N. COCHRAN, Hillhurst, Compton, Ont., Canada, breeder of Short-Horn Cattle, and a few other breeds of cattle, and warranted first-class. Correspondence solicited.

G. E. WARING, Jr., "Ogden Farm," Newport, R. I., breeder of pure blood Jersey Cattle. Stock for sale by W. B. Casey, agent for Ogden Farm, Boston.

G. E. PHILLIPS, Lebanon, Ky., breeder of improved English Berkshire swine and Short-Horn cattle, and a few other breeds of cattle, and warranted first-class. Catalogues sent on application.

ANDREW WILSON, Kingsville, Kan., breeder of thoroughbred Short-Horn Cattle. Stock for sale. Correspondence solicited.

THEODORE EADS, "Maple Dale," Corning, Adams co., Pa., breeder of Short-Horn Cattle, and a few other breeds of cattle, and warranted first-class. Catalogues sent on application. Address, C. C. PARKS.

ALBERT CRANE, Durham Park, Marion co., Kansas, breeder of pure Short-Horn Cattle of fashionable blood. Stock for sale. Catalogues sent on application.

THOS. E. TALBOT, Dabob, St. Charles Co., Missouri, breeder of pure Short-Horn Cattle. Good bulls and bull calves for sale. Prices low. Correspondence solicited.

W. M. BLACK, "Cornwall Farm," Carrollton, Greene Co., Ill., breeder of Short-Horn Cattle. Choice young bulls and heifers for sale at reasonable prices.

MILTON BURGESS, College, Iowa, breeder of Short-Horn Cattle, and Berkshire Swine. Stock for sale.

G. L. RYDERS & SON, "Locust Lawn Farm," Carrollton, Va., breeder of Short-Horn Cattle. Stock for sale at farmers' prices. Correspondence solicited.

DEKIN DUCKS and BRONZE TURKEYS.—The pick of the flock for 1875. Order now. Rotten Ducks, Buff and Partridge Cochins, Light and Dark Brahmas, Java Geese, &c. Address, W. CLIFT, Mystic Bridge, Conn.

THE FINEST LOT OF POLAND CHINA and BERKSHIRE Pigs, also Short-Horn Durham Calves constantly on hand, for sale at low prices. Address, H. R. RADFORD, one mile east of Winslow, Cowley Co., Kansas.

B. ABBE, Geary City, Doniphan co., Kansas, importer and breeder of Game Fowls. Game birds for the poultry. Address, B. ABBE, Geary City, Kansas.

JOHN KERN, SEEDSMAN, 111 Market street, St. Louis, Mo. Illustrated Catalogue free to all applicants.

PLANT SEED COMPANY.—Established 1845—Incorporated 1872. St. Louis, Mo. Importers and Growers of reliable seeds. Illustrated Catalogue free to all applicants.

Nurserymen's Directory.

J. JENKINS, Grape and Seedling Nursery, Box 45, Winona, Col., Co. Ohio, Specialties—Forest tree seedlings and trees, Evergreens, Concord Grape Vines, etc., etc. Catalogue FREE.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

A. P. LEE, Prime, Fresh Apple Seed for sale at low prices. Address, A. P. LEE, Des Moines, Iowa.

GREAT JOINT PUBLIC SALE
JUNE 15, 1875.

Short-Horn Cattle,

55 HEAD HEIFERS & CALVES.

BALANCE COWS AND BULLS.

Nokomis is on the Indianapolis & St. Louis R. R. 13 miles west of Paola, the crossing of the Illinois Central R. R., and 25 miles east of Litchfield, the crossing of the Toledo, Wabash & Western R. R.

A credit of six months will be given on approved note. Six per cent. interest, or five per cent. off for cash.

On day of sale. JOHN H. BEATTY, JOS. F. SCOTT.

Wholesale Grange Supply House.

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

Wholesale Dealer in DRY GOODS, BOOTS AND SHOES, CLOTHING, HATS, CAPS, And General Merchandise.

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

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

Taylor's Commercial NURSERIES OF LAWRENCE KANSAS

Offers for the spring trade of 1875 a full and complete assortment of general nursery stock, of unsurpassed quality, and at lowest prices. State whether bottom or prairie land. Describe the buildings, and give the present cash value of the property. Enclose stamp for answer.

Parties desiring to buy for cash, will find it to their advantage to correspond with me, before purchasing.

C. H. TAYLOR, LAWRENCE, KANSAS.

TEAM FOR SALE! Or to Exchange for City Property. TO FARMERS OR TEAMSTERS.

A number one Span of Horses and Wagon. The Horses have done no work, since last October; have been well fed, and stabled, and are in number one working order; they are perfectly trustworthy, in any place; also one of them is a good Buggy Horse. Any one wishing to purchase, call at 310 Kansas Avenue, they will be sold reasonable, or address Mrs. E. O. MURPHY, Topeka, Kansas.

One box of Cherry Brand Red Powder will make a pint of BLACK BUCK TOBACCO. \$1.25 per box. \$1.00 per box. \$0.75 per box. \$0.50 per box. \$0.25 per box. \$0.10 per box. \$0.05 per box. \$0.02 per box. \$0.01 per box. \$0.00 per box.

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

Jersey Bulls For Sale. One five years old, the other two years old, both registered in Herd Book. For sale, cheap, apply to CHARLES MOXLEY, Madison, Greenwood Co., Kan.

Beekeeper's Directory. BEES, QUEENS, HIVES, HONEY EXTRACTORS AND APPLIANCES. Send for Circulars and Price List to NOAH CAMERON, LAWRENCE, KANSAS.

ATTENTION, OWNERS OF HORSES. Ask your Harness Maker for the KING COLLAR PAD. These are warranted to cure any sore neck on horse or mule, or money refunded. If not cured, directions are given. Send for sample. KING COLLAR PAD, Sole Manufacturer, Buchanan, Mo.

PRAIRIE DELL FARM. Stallion Season, FOR 1875. EVAN DHU.

Bay Horse; foaled 1870; bred by H. Mix, Towanda, Pa., sired by Rydyk's Hambletonian, dam by Young American Eagle, son of American Eagle, sired by Grand dam by Young King Herod, son of King Herod. The get of this horse can be seen on the farm.

Rydyk's Hambletonian is the sire of Dexter, Jay Gould, James A. Howell, Nettie, etc., etc., and the grand sire of Bodine, Huntress Rosalind, Gloster, Judge Fullerton, Goldsmith Maid, and many others.

Major Edsall, one through Seal's Hambletonian—dam by Vermont Hambletonian son of Harris Hambletonian by Bishop's Hambletonian son of Imported Messenger. DuRand's Young Messenger DuROC by Messenger DuROC by Sir Archy DuROC by DuROC (791.) Seal's American Star sired the dam of Dexter, Jay Gould, Aberdeen, Nettie, etc., etc.

Macgregor has eight crosses of Messengers through Major Edsall, one through Seal's Hambletonian, and one through Young Messenger DuROC, total Messenger crosses, ten, limited to 30 mares including my own.

TERMS.—\$50.00 the season, mares not in foal returnable from the next season—season ends July 15th. Pasturage with running water, box stalls, etc., furnished on reasonable terms, the best of care given but all accidents and escapes are at the owner's risk, all charges are payable before the removal of the stock.

JOHN DRW, Supt. R. I. LEE, Topeka, Kansas.

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.

G. W. MARTIN, Successor to P. H. TIERNAN.

BLANK BOOK

LET US SMILE.

Philadelphia brags of having the most cleanly servant girls. They always hire out with the understanding that the mistress is to do the dirty work.

They find a man for peddling water in Louisville—that is, if he colors it with milk. You know yourself that there is a certain period in every boy's life, when he'd rather be ring-master in a circus than president of the United States.

"Oh, lickerly alamo, pop!" exclaimed a lad whose father had praised him for his gallantry in holding a young lady on his lap in a crowded car. "And didn't I feel just like a pot of hot potatoes?"

When six patent medicine almanacs are poked under a man's front door every day, there is no excuse for that man's painful ignorance in not knowing that spring is here.

A fellow with a red nose and blind in one eye is selling the negroes down South a pill warranted to make them white, and about fifteen minutes after they swallow it they lean across a saw-buck and turn themselves inside out, but the white is all in their eyes.

"Will you have a small piece of the light meat or a small piece of the dark," asked Bob's uncle, as he carved the turkey at dinner. "I will take a large piece of both," answered Bob.

A doctor went out west to practice his profession. An old friend met him on the street one day, and asked him how he was succeeding in business. "First rate!" he replied; "I have had one case." "Well, and what was that?" "It was a blight," said the doctor. "How did you succeed at that?" "Well, the old woman died, and the child died. But, by the grace of God, I'll save the old man yet."

About a year ago a very diminutive (Troy) man was married, and in due season found himself a happy father. Last Friday night his wife, as she supposed, lifted the infant over by her side. She did not discover her error, however, until she tried to force a dose of syrup down the infant's throat, when she was startled by hearing her spouse exclaim: "What in thunder are you about?" The good lady had mistaken her "hobby" for the baby.

A school-boy writes: The mowl, is a larger bird than the guse or turkey. It has two legs to walk with; and 2 more to kick with; and wears its wings on the side of its head. It is stubbornly backward about going forward.

Little Johnny writing a composition about pigs, says: Them at fairs is sometimes so fat that you can't tell which end it is that eats till you set a basin of gruel near by, and then it swings around and points at it like a compass. Some men spend a lot of time curlin' their pig's tales, which is no use except to eat, and is best roasted though the trotter is good too!

If a man wishes to cruelly lacerate the feelings of an acquaintance he remarks: "A cow would regard your feet with complacency, and upon being questioned why, he answers: "Because she would see at a glance that her hide wouldn't have to be cut down very much to make shoes of them."

"Oh!" she said in a breath as strong as a fanning mill, as she threw her arms wildly around and closed in on him. "Gimme breath," said he, and untangled himself and wiped the molasses candy from his mouth where she had kissed him.

"Pretty bad under foot to-day," said one citizen to another, as they met in the street the other day. "Yes, but its fine overhead," responded the other. "True enough," said the first, "but then very few are going that way."

SWEET POTATO PLANTS.

We will have again this spring, all the leading varieties of Sweet Potato Plants, which we offer at the very lowest rates. Properly packed and promptly shipped.

McCONNELL & CRAMP,
Manhattan, Riley county, Kansas.

ADDRESS FOR PRICES, LIST, AND CATALOGUE, AND
REQUIREMENTS FOR SEEDS, LIST, AND CATALOGUE, AND
but two horse power; and
bales either hay or
cotton without tramp-
ing or stopping.
Thirty bales of hay
per hour. Twenty
bales of cotton
per hour.

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 8 to 20 lbs.

They weigh from 150 to 200 pounds and over.

STOCK FOR SALE.

Correspondence solicited.

PUBLIC SALE

OF FURS

SHORT-HORN CATTLE

THE SUBSCRIBER WILL SELL.

Thursday, June 17th, 1876,

at 1 o'clock P. M., on the

St. Louis Fair Grounds, about 50 Head.

An excellent herd in every essential element, comprising Dutchess, Rose of Sharon, Oxford, Brown, Mariska, Princess, Young Mary, Young Phyllis, and Mrs. Motte crosses.

Terms—Four months' credit with six per cent. per annum, on approved notes.

Catalogues sent on application to Geo. W. East & Co., Chicago, G. O. Kelly, Louisville, or

C. J. QUIGLEY, St. Louis, Mo., or Col. J. W. JUDY, Auctioneer.

TIN WIRE RINGS.

Will not make a Hog.

SOLE MANUFACTURERS OF THE

\$200 A MONTH TO AGENTS

to sell the IMPROVED "HOME

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

WEDDING, Visiting and Business Cards, in every style, and at lowest prices, at the KANSAS FARMER Job Printing office, Topeka, Kansas.

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 39°. 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.

ATTENTION GRANGES!

The CLIMAX MOWER and REAPER,

A first-class machine in every respect, we offer to Patrons at wholesale rates. Send for Pamphlet, and

GIBBS & STERBET 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.

Croton Floral Garden

PAUL BUTZ PROPRIETOR.

NEW CASTLE, PENNSYLVANIA.

Wholesale and retail grower and dealer in Roses, Hot-houses, Green-houses, and Bedding plants. Also Evergreens, Shade trees, Shrubs, Grape Vines, etc.

Plants shipped at all seasons of the year, and at all parts of the United States, and Canada, with safety and dispatch. Catalogue FREE on application.

Established 1851.

\$100 to \$200 per month guaranteed to agent everywhere, to sell our

STRUCTURE WHITE WINE CLOTHES LINES.

Sample free. Address the HUDSON WINE MILL, 128

Malden Lane, N. Y., or 18 Clark st., Chicago, Ill.

Available! Reasonable! Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

Write for Catalogue and

500,000 ACRES

OF

Michigan Lands

FOR SALE.

The Lands of The

Jackson, Lansing & Saginaw R. R. Co.,

ARE NOW OFFERED FOR SALE AT

LOW PRICES AND ON LONG TIME.

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

Particular attention is called to the large tracts of the best White and Norway pine timber along the line of the road, and upon the An Sable, Cheboygan, Muskegon, and Manistowish 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. Especial attention is called to the farming lands in Crawford, Cheboygan, 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.

SHANNON HILL STOCK FARM.

ATCHISON, KANSAS.

Thoroughbred Short-Horn Durham Cattle, of Straight

Hard 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.

EARLY CHAMPION GRAPE.

BEST Early Grape known, 2 weeks earlier than

any other. It is in both beauty and quality.

Fruit large and handsome. Bunches compact; color and appearance of Concord. Vigorous grower. Immense bearer. \$1 each, \$10 per dozen—postpaid on receipt of price. DONNELLY & Co., Rochester, N.Y.

KAW VALLEY NURSERY.

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

150,000 Two Year Hedge Plants.

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

40,000 Maple, 2 to 5 feet, \$5 to 8 feet, \$10 per 1,000.

30,000 Budded Peaches, also 50,000 seedlings for groves or fruit, 2 to 4 feet, \$3 per 100, \$10 per 1,000.

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

E. R. STONE, 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 implements.

Send for circular. Address

Mrs. Geo. W. RUE, Hamilton, O.

Sample machine may be seen at W. W. Campbell & Bro., Topeka, Kansas, General Agents.

GRANGE PICTURE.

Size 19 by 24, in Oil Colors.

Single copies 50 cents.

Recommended by leading officers.

Letter and Note Heads copied from same.

Samples for inspection.

AMERICAN OILOGRAPH CO.

Milwaukee, Wis.

FREE

TRUMBULL, REYNOLDS & ALLEN.

Kansas City, Mo.

General Agents

ALLISON & ALLEN

FOR SEEDS

DEALERS

FARMER'S

GARDENER'S

Send for the most

interesting

CATALOGUE

Published by E. Dillon & Co.,

Seed & Castor Beans, and other

interesting matter, and giving de-

scription and price list of our im-

plements and Seeds SENT FREE.

RAILWAY PITCHING

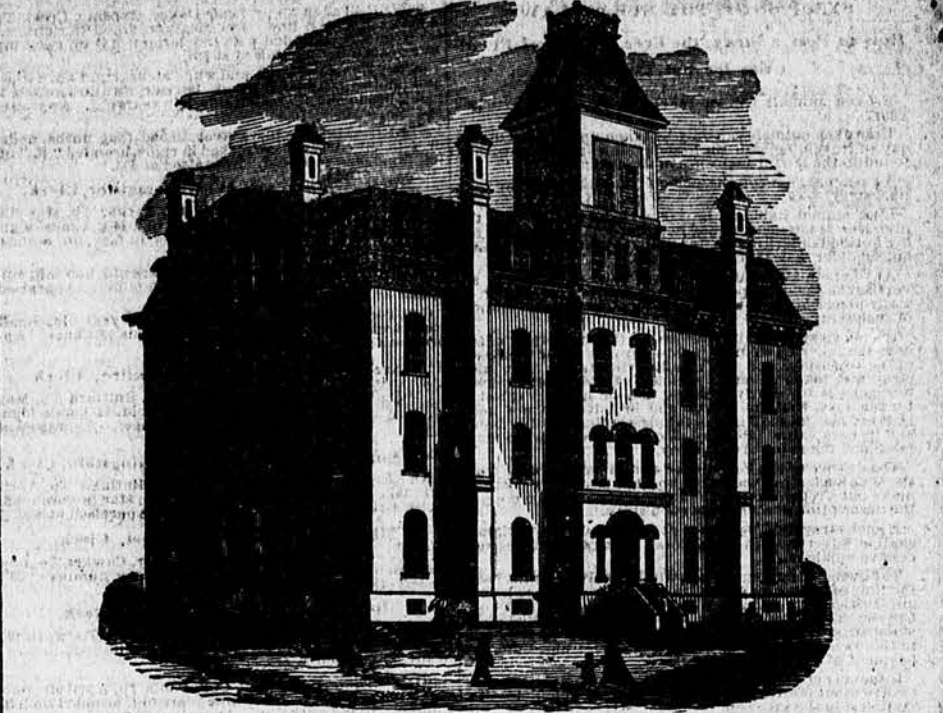
APPARATUS

Chapman's Best Fork and Conveyor in

use. The STANDARD machine, for over

moving, into sheds, barns, etc. Saves labor, time, money. Sent on trial. Circulars sent. Agents wanted.

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



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 \$4.00 per month. Incidental fees \$1.00 per term. Three terms a year. The Fall Term of the Normal School commences September 5th, 1876. Circulars sent free, on application. Write for information. JOHN WHERRELL, President.

SEEDS AND IMPLEMENTS.

H. MABBETT,

Successor to GRANT MABBETT & CO.

626 & 528 Shawnee St., Leavenworth, Kan.

WHOLESALE AND RETAIL DEALER IN

Seeds & Agricultural Implements,

Landreth's Warranted Garden Seeds,

Osage seed, and all kinds of Tree seeds, Seed Wheat, Oats, Rye, Barley, Potatoes, etc., Sweet Potatoes, Top Onions, Potatoes, Cabbages and Tomato Plants.

Garden City, Chicago and Moline Plows and Cultivators. Champion and Excelsior Reapers and Mowers. Sweepstakes and Massey Threshers.

A full line of Repairs of above Machines on hand from Factories. Kansas Wagons, Buckeye Grain Drills, Sulky and Revolving Hay Rakes, Shovel Plows, Field Rollers, Fan Mills.

A complete and full assortment of every description of Farming Tools, and everything kept in a First Class Agricultural House. Prices lower than any House west of St. Louis. Do not fail to call and examine stock, or send for price list before purchasing elsewhere.

WANTED.—Flax and Hemp Seed and Castor Beans.

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.

JOHN T. & E. S. NICCOLLI.

LIVE STOCK

Commission Merchants,

Union Stock Yards, CHICAGO, ILL.

Consignments respectfully solicited. Refer by permission to

C. N. Holder, Cashier Home Bank, Bloomington, Ill.

B. F. Fank, Mayor City of Bloomington, Ill.

A. H. Foster, Kansas City.

John E. Foster, Cashier Anderson Co. Savings Bank, Garnett, Kan.

Hon. W. H. Smallwood, Secretary of State, Topeka, Kan.

J. K. Anderson, Editor Kansas Farmer, Topeka, Kan.

NORMAN HORSES

Have made the Breeding and Importing of Norman

Horses a specialty for the last 20 years have now on

hand and for sale 100 head of Stallions and mares be-

coming 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.

Allen's Planet Jr. Drill and Hoe.