

## AGRICULTURAL.



### OUR CLUB, AND WHAT IT DOES.

Under the above caption the last received number of the *Germantown Telegraph* publishes in its agricultural department a contributed article, which not inaptly might be adopted in sentiment, if not in detail, by the Domestic Gardener's Club of this city.

The writer opens with a little sage advice to all practical farmers in that region—to at once form clubs in their respective neighborhoods, pledging his word that, if they do so, by next spring they will feel themselves amply repaid for any trouble incident to sustaining such a meeting.

In his own neighborhood—ignoring the idea of a large club, collecting together from five to ten miles around—some twelve or fifteen near neighbors associated themselves in the most primitive manner imaginable—being convinced of the fact that too much formality is injurious to free and full interchange of ideas. They therefore framed no rules and elected but three officers—president, secretary and treasurer. In their discussions they are governed by the laws of politeness and the decision of the president, who, by common consent, is the owner or occupant of the house in which the meeting may be held—the club being convened at the houses of the members in rotatory order. This of course gives a new president every succeeding evening. To defray current expenses a weekly payment of five cents is required of each member.

At the first meeting there was no stated discussion—the doings partaking more of the nature of a conversation. Among other subjects incidentally introduced was the subject of feeding stock cattle. The president stated that he had found it most economical to feed corn fodder and oat straw to stock cattle early in the season, in order that the stalks of the cornfodder may become broken up shortly by the continued tramping of cattle on the frozen ground. His rule is, fodder in the morning, hay at noon, and oat straw at night; he usually sprinkles the oat straw with salt water before giving it to his cattle, and thinks this the best way of giving them salt. He saves his wheat and oat chaff, and feeds it to the cattle early in the season, usually selecting a still, damp day that it may not blow about. His horses when idle are kept altogether on hay, of which they have as much as they will eat; when at work they have cracked oats. The oats for feed is run through a small horse-power mill, which he has on the farm, with the grinding surfaces so far apart as to break it in several pieces, but not make it into meal. This he considers the most economical food for horses, much more so than feeding the whole grain, and the writer testifies that his horses were kept in as good order as a horse can be, as fat as moles, and yet he says he did not feed but twenty-four bushels of oats from the 1st of November to the 1st of March, last winter.

Another member had experimented a great deal in keeping cows for milk, and found oats and corn ground together in equal proportions to be the best and most economical feed; he usually fed six quarts of this meal and fifteen pounds of clover hay per day to his cows; he found that on a very cold day one of them eat her allowance of meal and twenty-one pounds of hay.

Another member had paid more attention to the food consumed by his sheep than to that of any other kind of stock. He had never found much profit in fattening sheep on grain, but prefers to feed it to cattle. He usually keeps from twenty to twenty-five head of sheep all winter, say from the 1st of December to the middle of May, and finds by measurement of the hay in the mow that they will eat about five and three-quarter tons; his amount allows them hay three times a day, and as much of it as they will eat. If furnished with plenty of straw, they will make about one load of manure to every sheep. He usually keeps his small calves with the sheep, as he finds they will eat the hay which the sheep tramp under their feet.

As to pigs, the same member had discovered that two pigs, each a year old, would eat as much clover hay as a sheep, and always gave them a forkful once a day in a low rack made

on purpose; he kept the pigs over winter and in good condition, on clover hay, one feed of corn on the ear, and what slops were made at the house.

The experience of substantial farmers may differ in many respects, owing to surrounding circumstances; but there can be no doubt that similar causes—all things being equal—will evolve similar effects. To illustrate the point—say that, in the experience of one farmer, carrots, as a winter feed, had been found not only to improve the condition of milk cows, but also to increase the quantity and richness of the milk. This fact, thus experimentally ascertained, becomes approved and, when published, or otherwise communicated, others also test the value of the carrot for such purpose—and with like effects; the result is that—since carrots are thus shown to be valuable winter food for cows, inquiries are at once raised as to the cost of producing carrots in comparison with other fodder and, if these latter results are favorable, the carrot is at once ranked among the most profitable kinds of winter feed for milk cows.

Items of useful information are constantly recurring in the experience of every observing farmer, which, if made public property by means of a farmer's club, would be of direct benefit to the community. In the absence of such an auxiliary for diffusing useful agricultural knowledge, much that would be of great value to the mass of farmers and others of rural tastes is not only excluded from becoming an integral part of agricultural literature, but also denied the legitimate office of all discovery, as well relating to the most trivial as to the most intricate subjects embraced in the expansive field of science—the common benefit of mankind.

The suggestions contained in the January number of the *American Agriculturist* are so pertinent on the utility of farmers' clubs that we add the testimony of that excellent journal to what we have already set forth on the subject:

Farmers need the benefit of these more than any other class. Mechanics, merchants, and business men generally, come more in contact; their ideas are rubbed up bright by practice; they learn from each other's methods; they talk more about their work and the best way of doing it, than farmers who are separated from constant intercourse by their broad acres. The meetings for social chat about farm matters held at the school house, or from house to house, are of great utility. No one ever attended such a meeting without carrying home some new hint, or having a new train of thought started. Too much formality, too long a constitution and bye-laws, are to be avoided. The more familiar, conversational they are, the better. Every neighborhood in which they are held will be benefited, and their effects will be seen not only in greater crops, better roads, tidier farms, and better stock, but in healthier, and happier inhabitants. Especially should the young men be induced to take part in these meetings: they should be taught that agriculture is ever progressive, and that he who does not keep pace with it, must be, like Tim Bunker's neighbor, Jake Frink, a ways "runnin' ast rn."

We are not aware that any associations of this description have as yet been formed, outside of this city. If in any of our numerous, flourishing settlements in Deseret—north, south, east or west of us—any thing has been done towards the organizing of any society, club or meeting of farmers by whatever name, for the purpose of diffusing useful information, interchanging ideas and in all laudable social methods of enhancing each other's interest, we should like to know it. If there has not, there should be. If there has been, please advise us occasionally, for the benefit of the readers of the "News," of your proceedings.

### BET SUGAR MANUFACTURE IN OHIO.

Prof. M. A. Mott, of Licking county, O. says the *Cleveland Herald*, has been quite successful in the culture of sugar beet and the manufacture of sugar therefrom. An interesting account of his operations has just been published in the *Cincinnati Commercial* by Mr. Klippant, corresponding secretary of the Ohio State Board of Agriculture.

Mr. Mott, this year—for the purpose of experimenting—raised ten acres of beets. It is stated, as the result of the Professor's success—having seen and tasted the sugar—the next year the farmers will plant an aggregate of one thousand acres of beets.

Mr. Klippant, says the *Herald*, visited the sugar works of Prof. Mott on the fifth of December. He describes the Professor as a man of very limited means, but persevering

competent and enthusiastic. His machinery and apparatus are represented to be of the simplest and cheapest kind—consequently very imperfect. With his slender capital he may justly be said to have accomplished wonders. It is stated that he can manufacture a fair article of sugar for less than four cents per pound.

The *modus operandi* of the beet-sugar making is thus described by Mr. Klippant:

The first operation to be performed is to reduce the beet to a pulp. This is done by a cylindrical rasp or grater. This grater is operated by an ordinary threshing-machine horse power. The grater is two feet in diameter, eight inches wide, and revolves 350 times in a minute. In the course of half an hour (by the watch) one thousand pounds of beets were reduced to a fine pulp.

The pulp is then put in gunny bag cloths, in the form of mats, and placed in a hand press. In a few minutes the 1000 pounds of beets yielded seventy-eight gallons of juice, weighing a trifle over 8 pounds per gallon. With a proper press and motive power the beet will yield about 80 per cent. of juice; but in to-day's operations the Professor obtained 62 per cent. only. Mr. M., however, said that he would steam the pulp, and press it again, when he would get from 15 to 20 per cent. more.

From the press the juice is placed in a copper vat or tank, over a brisk fire, and certain chemicals are then added. From this tank the juice is put on a common sorgho evaporator, until concentrated to 20 degrees of Beaume's saccharometer.

From the evaporator the juice (now syrup) is placed in filters filled with animal black, or more popularly, "bone black;" and after having been filtered, is again boiled, and is placed in proper vessels for crystallization to take place.

We witnessed every operation and manipulation from first to last—not with the original juice, certainly, but with it in the different stages, until it appeared as rather dark, but very fine-grained and very sweet sugar.

There is, therefore, no longer any doubt entertained upon the subject that good, merchantable, brown sugar can be made from the beet, in forty-eight to ninety-six hours, from the rasping of the beets.

The above will be acceptable information to those who have, for years past, in Deseret, labored assiduously to produce good, merchantable syrup from the sugar beet. The process adopted by Prof. Mott appears to us altogether the most feasible and adaptable to this locality that has yet come to our notice.

We are not ignorant of the prejudice now existing among the people in general throughout these valleys against beet-syrup—it being alleged by some, that the beet of itself inherently possesses properties injurious, if not poisonous—and for the proof of this refer to the cankerous affections produced among children while the beet-juice was used by them. There was justice in the complaints against the syrup once manufactured in this city at the sugar works in the ponderous copper boilers of that extensive establishment, because of the great labor and difficulty of keeping the boilers properly cleaned—an accumulation, or throwing off of verdigris being the inevitable consequence—which, of course, tinctured the syrup—and, there is no reasonable doubt, imparted to it deleterious elements. An alarming prevalence of canker, especially among children, was noticeable in the community while the beet-syrup was first made here continued in family use. There can be no object that we know of in disguising the fact that not a few families in this city, perceiving the pernicious effects of that far-famed article of syrup, utterly expunged it from the list of home stores—notwithstanding the scarcity of sweetening among us at that time.

Whether any other causes directly cooperated at the same time to induce canker to such an extent, is not any part of our purpose now to inquire. It is quite obvious and, we believe, generally admitted, that the article of beet-juice then manufactured and used by the people operated in some degree as an insectant. It is equally obvious that there was large room for improvement in the saccharine quality of that delectable article, as well as in its purification from superabundant poisonous, alkali and vegetable constituents.

We make no pretensions to chemical erudition, either practical or theoretic; but, resting upon the accepted axioms, "what man has done, man may do," and, "some things may be done as well as others," our judgment is that it would require no scientific herculean effort to either neutralize or separate from the pulp or juice those noxious proportions of alkali, soda and other minerals. The excess of crude vegetable matter may doubtless be

expurged by a more simple process of filtration or rectifying.

The existence of mineral element to an undesirable excess in the sugar-beets grown in this country, we regard as the chief hindrance to more encouraging success in our efforts at syrup-making. As to the presence of cankerous poisons, if they are to any extent the effects of the excessive mineral elements already referred to, if by successive experiment means for thoroughly purifying the juice should be attained—the possibility of which cannot be doubted—then by so much will the syrup manufactured be more palatable and marketable. Whatever of deleterious qualities may result from the boiling of the syrup in copper may of course be remedied by more rigid cleanliness or a substitution of iron boilers. These obstacles surmounted and success is ours, so far as the syrup is concerned. A passably fair quality of molasses once secured from the sugar-beet and we apprehend the advance to sugar-making will be as certain as it is most desirable.

We are gratified with the assurance that, not daunted by the failure thus far among our people in manufacturing an unexceptionable article of syrup, there are yet in progress and contemplation vigorous experimental efforts for the production, not only of good syrup, but sugar from the sugar-beet.

Our desires for their complete success are most fervent.

### AMERICAN JUTE—HIBISCUS PALUSTRIS.

We have before us a paper read at the October meeting of the Franklin Institute, Philadelphia, by H. Hudson, upon the American jute, the experiments that have been made upon its fibre for the manufacture of paper, cordage, textile fabrics, etc., by Mr. W. J. Centelo.

This plant is in this paper said to grow in abundance in the swampy lands of Pennsylvania, New Jersey, New York and other Eastern States. In its natural state the plants grow from 5 to 7 feet in height, and are from  $\frac{1}{4}$  to  $\frac{3}{8}$  inch in diameter. Its yield of fibre is large. An acre of marsh land near Burlington, N. J., was plowed and the seeds of this plant scattered along the furrows on the 28th of April last; in September the ground was thickly studded with plants. Previous experiment has discovered that where stalks have been cut off the one season a dozen more spring up the next. No insect has yet been discovered depredating upon it. It is thought from close observation that from 3 to 3 $\frac{1}{2}$  tons of fibre can be derived from a single acre of ground. Rope and paper manufacturers have estimated it to be worth \$100 per ton. It will take the place of linen rags in the manufacture of paper. The plant is perfectly hardy and needs no care or cultivation after the first year.

If all this is found, upon further experiment, to be true, a new avenue is opened for turning the refuse land of those States to some practical account, and to the Western men it is also of interest if the plant can be grown to advantage upon the large unclaimed sloughs and low lands of the prairies. There seems to be no reason why its growth will not be as good here as at the East, and, if it follows the habits of other plants, even better.—[Prairie Farmer.]

### UPRIGHT TREES.

When crooked, lop-sided, leaning trees are seen in a wild forest, we call them picturesque, and let it go. But when we see them in a neighbor's orchard (or our own), or by the roadside, or in a lawn, we say somebody is to blame, for generally it comes from sheer neglect. As to leaning trees, the history is something like this: When first transplanted from the nursery or the woods, they are straight and tall. They are set out in exposed places, and not being staked and tied up, they soon get out of the perpendicular. This is not to be wondered at, considering the smallness of the roots, and the softness of the soil. It is a very easy matter to prevent this. Let every newly planted tree be staked and tied up, using broad and soft bands to prevent chafing the bark. Or, in the lack of stakes and bands, use heaps of stones laid over the roots on the windy side, which will ballast them. In case a tree gets thrown over, it can be righted up by loosening the earth about the roots, and drawing it up, and fastening it to a stout stake. If it has stood leaning for several years, it may be necessary to use an axe on one or two obstinate roots. But by all means, get every tree up straight, and then keep it up.—[Agriculturist.]

**POULTRY DUNG.**—Have this regularly swept up every Saturday, packed away in barrels, and sprinkled over with plaster. Dana, with force and truth, says: "The strongest of all manures is found in the droppings of the poultry yard." Next year each barrel of it will manure you half an acre of land. Save it, then, and add to the productive energies of your soil. Don't look upon it as too trifling a matter for your attention; but recollect that the globe itself is an aggregation of small matters.