

THE OLD AND THE NEW IN FARM ECONOMY.

He was a thrifty young farmer with a good wife, some capital, a healthy constitution and plenty of good Dutch courage. They hailed from Mercer county, Pennsylvania, and, for obvious reasons, we will call them Mercers. They came to Santa Clara county seeking a home and such prosperity as is almost always the reward of honest industry when directed by tact and judgment. Their experience is described as follows in the San Jose (Cal.) *Mercury*:

They bought a farm of 160 acres of gravelly land near the foothills. We say they, from the fact that in accordance with the old Dutch custom the man and frau counseled with each other before taking an important step. Richer land would have suited them better, but the richest land in our valley they learned was not the surest for crops, while the gravelly land, with good farming, is absolutely sure. The land they bought had been farmed for many years according to the old California system, which means shallow plowing and cropping with grain every year, year in and year out, and annually burning the stubble after the crop is harvested. The former owners had practiced this plan thoroughly, it being about the only thing they were thorough in, and the system had so nearly ruined them that they were compelled to sell out and seek other and newer lands. The neighbors smiled when they learned that the Mercers had bought this farm, as though they thought a good joke had been perpetrated upon the new comers. Still, in the kindness of their hearts, they resolved to assist them with what they considered good advice. So when Mercer attacked the huge manure pile which had lain for years behind the stable, and grown larger by constant additions from it, and began to spread it around upon a good sized piece of land, they went over and asked him what he intended to do.

"Why," said he, "I am going to make a garden. You all have gardens, don't you?"

"Oh, no," said they, "peddlers bring us our vegetables and sell 'em cheap. This land won't grow vegetables, it's too dry." "Well," said Mercer, "I am going to plow this manure in deep and see what it will do."

"Do," said his neighbor, "it won't do nothin', you'll get your labor for your pains. You mustn't plow deep; you see moisture comes up to the top of the hard ground, and there it stops, and if you plow deep, the roots of your crop won't reach the moisture, for all the moisture, will dry out from the loose ground."

"Mine gracious, it will!" said Mercer. "You say, don't spread manure and don't plow deep. In my country this is the principal part of farming, and I don't know any other way. I thank you. You mean to do me good, I know you do, and I thank you. I must try my way a while and if it don't work well, then I will try yours."

The Mercers have now been practicing the good old plan of farming they were brought up to for the last seven years, and a prettier farm, or more thrifty family it would be hard to find. He first tried summer-fallowing, but says that pasturing is more profitable, and now has his main farm divided in four fields, with passages leading from each to the barn yard which is also the watering place. In one of these fields each year he pastures all his stock (about 25 head); the next year he plows it, putting the stock in another field. He plows deep all the time, and gets all the manure he can, even buying and hauling it for some distance.

A MACHINE, by which 600 pails can be turned out daily, the sides of each pail being made in one piece, has been invented at Merriamport, Mass. Round a block of wood shaped like a water pail, the machine cuts off a strip of the requisite thickness for a pail, and of the same length the block itself is. A piece of the strip, of the right length for a pail, is then cut off, the edges tongued and grooved, and a groove cut to receive the bottom.

MAKING AND PRESERVING CIDER.

As the cider season is at hand, the following suggestions taken from an article in the *Scientific American* may be of use to some readers: A pure, sweet cider is only obtainable from clean, sound fruit, and the fruit should therefore be carefully examined and wiped before grinding.

In the press, use hair cloth or gunny in place of straw. As the cider runs from the press let it pass through a hair sieve into a large open vessel that will hold as much juice as can be expressed in one day. In one day, or sometimes less, the pomace will rise to the top, and in a short time grow very thick. When little white bubbles break through it, draw off the liquid through a very small spigot placed about three inches from the bottom, so that the lees may be left behind. The cider must be drawn off into very clean, sweet casks, preferably fresh liquor casks, and closely watched. The moment the white bubbles, before mentioned, are perceived rising at the bung-hole, rack it again. It is usually necessary to repeat this three times. Then fill up the cask with cider in every respect like that originally contained in it, add a tumbler of warm sweet-oil, and bung up tight. For very fine cider it is customary to add at this stage of the process about half a pound of glucose (starch sugar) or a smaller portion of white sugar. The cask should then be allowed to remain in a cool place until the cider has acquired the desired flavor.

In the meantime clean barrels for its reception should be prepared, as follows: Some clean strips of rags are dipped in melted sulphur, lighted and burned in the bung-hole, and the bung laid loosely on the end of the rag, so as to retain the sulphur vapor within the barrel. Then tie up half a pound of mustard seed in a coarse muslin bag, and put it in the barrel, fill the barrel with cider, and add about a quarter of a pound of isinglass or fine gelatine dissolved in hot water. This is the old-fashioned way, and will keep cider in the same condition as when it went into the barrel, if kept in a cool place, for a year.

Professional cider makers are now using calcium sulphite (sulphite of lime), instead of mustard and sulphur vapor. It is much more convenient and effectual. To use it, it is simply requisite to add one-eighth to one-quarter of an ounce of the sulphite to each gallon of cider in the cask, first mixing the powder in about a quart of the cider, then pouring it back into the cask and giving the latter a thorough shaking or rolling. After standing bunged several days to allow the sulphite to exert its full action it may be bottled off. The sulphite of lime (which should not be mistaken for the sulphate of lime) is a commercial article, costing about 40 cents a pound by the barrel. It will preserve the sweetness of the cider perfectly, but unless care is taken not to add too much of it, it will impart a slight sulphurous taste to the cider. The bottles and corks used should be perfectly clean, and the corks wired down.

A little cinnamon, wintergreen, or sassafras, etc., is often added to sweet cider in the bottle, together with a dram or so of bicarbonate of soda at the moment of driving the stopper. This helps to neutralize free acids, and renders the liquid effervescent when unstopped; but if used in excess, it may prejudicially affect the taste.

It is a curious fact, writes a missionary from China, that tobacco, sweet potatoes and Indian corn have all been introduced from America, and are now thoroughly domesticated here. As to the first, so cordially has it been welcomed that 9 out of 10 adult Chinese males smoke it. They do not chew. Within the last five years the artichoke, which in my boyhood was found with horse-radish in every farmer's garden in central New York, is being introduced in this region. It is pickled and eaten as a relish. Oddly enough, it is called foreign ginger. Sometimes we are asked how it happens that foreign ginger is not pungent.

SELECTING BROOD SOWS.

The *Berkshire Bulletin*, organ of the Berkshire Swine Breeders' Association, has the following: A brood sow should be a good milker. However good in other respects, if deficient in this, she should hardly be retained as a breeder. An abundance of milk for the first eight or ten weeks of their existence is the best preparation young pigs can have to fit them for profitable growth in after life. It is not always possible to decide with certainty whether or not a young sow will prove to be a good milker; but as with cows so with pigs—we may learn from observation and trial to know in some degree, judging from their general appearance, what to expect. Much will depend upon the dam and grand dam in this regard. Milking qualities in swine are as surely transmissible to progeny as in cattle. Thus it is as true of swine as of cattle, that this trait may be greatly improved by retaining only good milkers for breeders, as well as by feeding them when young with a view to their development as milk producers rather than as fat producers. For this reason, spring and early summer litters are usually the best from which to select young brood sows. They can be kept through the summer almost entirely on grass, which, if abundant and in variety, will make them grow nicely, and at the same time the exercise required in grazing will keep them in good health and thrift. By the time cold weather comes on, and corn is to be fed, they will have become nearly old and large enough for service. But even after this, continued care must be taken that too much corn or other fat-producing food should not be given them. We must, however, bear in mind that at this period all animals naturally lay up fat, which afterward goes to enrich the milk. Hence, while they should not be allowed to become over-fat, they should yet be so fat as to supply this demand of nature, and to retain the general health and vigor of the system.

When they have dropped their first litter, the most they will need for five or eight days will be cooling drinks and very little rich food. Wheat bran scalded and then thinned with cold water, to which may be added a handful of ship-stuff or middlings, may be given. In ten days or two weeks the richness of the food may be gradually increased, great care being taken, however, both as to the quality and quantity, that these changes may not injure the health of the sow, or so affect her milk as to cause scours in the pigs. It is a very common mistake in feeding sows having young pigs to give them too much strong food when the pigs are quite young.

It is not until the pigs are some three or four weeks old that they really begin to tax the sow heavily. Then it is that the sow should be liberally and regularly fed on good, nutritious milk-producing food, and at the same time the young pigs should be taught to feed by themselves at a trough out of the reach of the sow. If thus managed, both sow and pigs are benefited. The strength of the former is kept up, and her disposition to produce an abundance of good, rich milk is so encouraged as to fix this as one of the best traits of her nature, while the pigs, by the extra feed given them, make a corresponding rapid growth, and that at a comparatively small cost.

Young sows brought up in the manner suggested, and thus cared for with their first litters, may be depended upon to do as well or better with their next, provided they have anything like fair treatment. In case, however, a sow fails to prove herself a good milker, after a fair trial, they should be replaced by one of better promise, unless for some special purpose it is thought best to retain her.

PRESERVING LEATHER.—To preserve leather hose, belting, etc., in good condition, use crude castor-oil, warmed, if possible, and freely applied. It increases the pliability of the leather and the cling of the belts, and does not become rancid. Rats avoid it. In hose it should be pumped in from the interior under considerable pressure, thus thoroughly filling the pores.