

## The Apiary.

**THE APIARY.**—The American *Bee Journal* states that the nectar of flowers, as gathered by bees, is a watery solution of cane sugar. In the process of this transformation, the cane sugar is decomposed into three different kinds, which constitute honey. The heat which the bees maintain in the hive causes this change; weak acids, as well as heat and moisture, can effect a similar conversion of cane sugar.

**FERTILITY OF THE QUEEN BEE.**—The American *Bee Journal*, in an article on the Queen Bee, thus treats of the fertility of this insect:—

It is an interesting question, how many eggs a queen may lay in a given time, under favorable circumstances. Dzierzon estimates the number of eggs laid by a vigorous queen, during the breeding season, at three thousand per day, if the colony be populous enough to cover the combs properly. This is certainly not incredible, as queens have been known to lay from 260 to 300 in an hour. Kirsten limits the number at one hundred per day, at the most favorable season. But, as eggs are hatched and the brood gradually matured in twenty one days, if this were correct, there could never be more than 4200 cells occupied by the eggs and brood. These could be amply accommodated in a single comb, ten inches square; whereas we not unfrequently find a dozen such combs in a hive filled with brood at one and the same time. On the whole, we may confidently assume that a vigorous queen may annually lay from 250,000 to 300,000 eggs, or at least 1,000,000 in the four years which constitutes the average duration of a queen's life. Many of these eggs, indeed, may not be hatched, or become fully developed, as the workers are apt to destroy brood, especially when pasturage fails, or the weather proves unfavorable.

## Domestic.

**CURRANT WINE.**—The *German Town Telegraph* gives the following directions in regard to making currant wine:—

The currants should be fully ripe when picked; put them into a large tub, in which they may remain a day or two; then crush them with the hands, unless you have a small patent cider-press, in which they should not be pressed too much, or the stems will be bruised and impart a disagreeable taste to the juice. If the hands are used, put the crushed fruit, after the juice has been poured off, in a cloth or sack and press out the remaining juice. Put the juice back in the tub after cleansing it, where it should remain a few days, until the first stages of fermentation are over, and removing once or twice a day the foam copiously arising to the top. Then put the juice into a vessel—a demijohn, keg or bar-

rel—of a size to suit the quantity to be made, and to each quart of juice, add three pounds of the best refined sugar, and water sufficient to make a gallon.

Thus, ten quarts of juice and thirty pounds of sugar, will give you ten gallons of wine, and so on in that proportion. Those who do not like it very sweet can reduce the quantity of sugar to 2½ or 2 lbs. per gallon.

The cask must be full, and the bung or stopper left off until fermentation ceases, which will be in twelve or fifteen days. Meantime the cask must be filled up daily with water, as fermentation throws out the impure matter. When fermentation ceases, rack the wine off carefully, either from the spigot or by a syphon, and keep it running all the time. Cleanse the cask thoroughly with boiling water, then return the wine, bung up tightly, and let stand for four or five months, when it will be fit to drink, and can be bottled if desired.

## The Poultry Yard.

### To Keep Fowls Free from Vermin.

The *London Field* has an article on this subject from the pen of John Douglas, professional breeder, from which we make the following brief extract.

"There are several kinds that infest the hen. By attending to the following remedy, they will be entirely kept clear. First of all, if in confinement in the dust corner of a poultry house, mix about half a pound of black sulphur among the sand and lime that they dust in. This will both keep them free from parasites, and give the feathers a glossy appearance. If infested with the insects, damp the skin under the feathers with a little water, then sprinkle a little black sulphur on the skin. Let a bird be covered with the insects, and they will disappear in the course of twelve hours. Also, previous to setting a hen, if the nest be slightly sprinkled with the sulphur, there is no fear of the hen being annoyed during incubation, neither will the chickens be annoyed by them. Many a fine hatched brood pines away and dies through nothing else, and no one knows the cause. Having had an ostrich under my care that was pining, I looked into his feathers and observed thousands of the parasites. I employed tobacco-water, also lime-water, under my then master's orders, to no effect. In his absence, I well damped him, and sprinkled him under the feathers with black sulphur, when next day they were examined with a microscope, and every one was dead. Having had some macaws, also parrots that were addicted to biting off their feathers, I employed the black sulphur by well syringing them with water, then sprinkling the sulphur over their skins. If tame, sponge the skins, then rub gently with the points of the fingers, with the sulphur, every