

Buttermilk.

afflict his patients, and those who are afflicted with what is called alcoholic disease. He claims to be the worst case of alcoholism by a long way. He claims to take the place of whisky and beer. More Buttermilk would be a decided advantage for the so-called civilized nations. We are not to deal at the present time about the long drink among the working people. A permanent good will be found in a satisfactory substitute is made of whisky and beer the human cases, is like the lower animals and water—they become crazed. If buttermilk is the substitute for whisky and beer, it is a good thing for. Instead of feeding this to the people, as is the case at some places, one will in future undertake to feed the people wholesome quantities and have them in restaurants, etc., as is the case with other forms of beverages. We find many of the bars in New York City are now list buttermilk among the specialties. Thousands of glasses are sold daily during hot weather. It is a decided advantage in that a man who does not care for a long drink, does not care for a drink with soda-waters of doubtful purity, and desires to be sociable can ask for a glass of buttermilk. Man is a social animal and it is useless to try to break up the social customs without a satisfactory substitute. If, however, these social customs are utilized for the good, instead of for the bad, the members of a social community

H. H. DEAN.

The Rearing of Good Queens.

1. The hive must be well filled with bees, and the bulk of them must be young ones.

Spraying Ten Acres of Apples.

I figure that an orchard of ten acres would probably contain on an average of 400 trees. I figure on the labor of three men to operate a power outfit, two men to handle the spraying rod; one on the tank and one on the ground, and one to drive the horses. I figure two men at \$1.50 per day, \$3.00, and a team and man at \$4.50—that may be a little high, but that is what we have to pay in our county—making a total



One of the Females to be Sold by Auction on Glenescott Farm,
near London, Ont., on September 15, 1915.

Regarding the material, I wish to give you the result of the material I use. For my first spraying I use the commercial lime-sulphur for scale or aphid or fungus. I use it at the strength of 1 to 11, and try to use it just before the buds are opening. As to the average price of commercial lime and sulphur, I figure it at \$10.00 per barrel of 40 gallons, and one barrel diluted at 1 to 11 would make 480 gallons of spraying mixture, which would make a cost of 2.08 cents per spraying gallon. Now, at cost of labor of .50 and cost of material at 2.08, would make a total of 2.58 cents per gallon. I figure on an ordinary-sized tree 5 gallons to a tree—some trees will take less and some a little more, but I make do by judgment and care 5 gallons can be made to do the work. At 5 gallons to a tree, and 2.58 cents per gallon would make it cost 12.9 cents per tree for the first spraying. For the second spraying, for codling moth principally, and for fungus, which I give just as the blossoms have fallen, I use commercial lime-sulphur at the same cost per barrel, but dilute it at 1 to 30, and that would make 1,240 gallons or a cost per gallon of .83 cents. I add with that arsenate of lead, which I figure at an average of 14 cents a pound in small packages, it would probably cost less in larger packages. I figure 2 lbs. of arsenate of lead to 40 gallons of water, or 5 lbs. to 100 gallons, making the arsenate of lead cost .7 cents per gallon. The labor will cost you just the same for your second and third spraying. The lime and sulphur would cost .83 cents and the

I use 150-gallon tank and gasoline engine. I prefer a 150-gallon tank to a 200-gallon tank. In one of the orchards it is very hilly, and I find no trouble in getting around with a 150-gallon tank. I do not believe in horse-power for spraying trees. I do not think it is practicable. You can only generate power when your wheels are in motion; I prefer gasoline engines to hand outfits for several reasons. I think first that they are far cheaper to operate. You can operate a gasoline engine for 10 or 15 cents a day for gasoline, and you can get a higher and more even pressure. I prefer a pressure of over 150 lbs. I have experimented this past season on different pressures, and I found that I got much better results from a pressure of 150 to 200 lbs., an average of 175 lbs.; as I say, high pressure is more economical in spraying. You can get where you want to more quickly, and you do not waste so much material. I think that high pressure is

I recommend gasoline engines for another reason. They are always useful to a man on the farm. They can be easily attached to other things, generally by undoing three or four bolts, and they can do lots of little things on the farm. When I was through with my spraying I took the engine to my home and attached it to a little pump which I have there, and it is now supplying water for the entire farm. They do not need much looking after by anyone who can follow the instructions given and avoid trouble. There is an old saying that if you spare the rod you will spoil the child; I think that if you spare the material you will spoil the fruit every time.