latter, as equally easy, and vastly the more praiseworthy attempt. I have known Jersey bulls which weighed 1,600 or 1,700 pounds; and I do not know that they were the less desirable, as shown by their progeny. I have seen Jersey cows which were good looking cows, judged by the ordinary standard, that looks to double adaptation, which were also good as producers of milk rich in cream; as certainly I have known some most angular, undesirable cows, as judged by the same standard, which were also inferior at the

## Holstein Bull and Cow, "Uncle Tom" and "Isis."

We now give our readers illustrations of two Holstein Cattle, the property of Messrs. Smith & Powell, Syracuse, N. Y. This class is coming into favor in many parts of the States. The crowning superiority of this class is that they produce a larger quantity of milk, for the weight and size of animal, than any other breed.

Mr. Smith has just returned from Holland with another large addition to their herd. This class of cattle are reared to the greatest perfection in Friesland, North Holland.

A HOLLAND DAIRY .- The best pupils of the Agricul-tural College of Grignon, in France, are sent, at the public expense, on an ex-

cursion each year, to examine the improvements in some agricultural district. In 1876 they visited Holland and gave an account of a 500 acre farm, reclaimed from Harlem Lake. After this land was drained and rendered fit for miscellaneous crops, Mr. Amersfoordt devoted it principally to dairy purposes, keeping the justly celebrated black or Holstein breed. Many of his cows are said to produce 4,865 quarts yearly; the average yield per cow being thirteen quarts, or an annual yield of 4,000 quarts per cow. It is said that 66 gallons of milk produce 18 pounds of but-ter and 40 pounds of cheese; and that the average ross income per cow is about \$112 of our

It will be perceived that this large gross income per cow is made from the large quantity of milk yielded, and not from the peculiar richness of the milk; for 66 Dutch gallons would weigh fully 660 pounds, so that it would require 36— 60 pounds to make a pound of butter, and 111 pounds of milk to make a pound of product, whilst we often make a pound of product from ten pounds of milk—that is, 1 pound of butter and 2 pounds of cheese from 30 pounds of milk.-Kentucky Live Stock Jour-

A plan for improving the aroma of butter, in use in many parts of Switzerland noted for good milk and fine butter, is as follows: The milk, as soon as it is

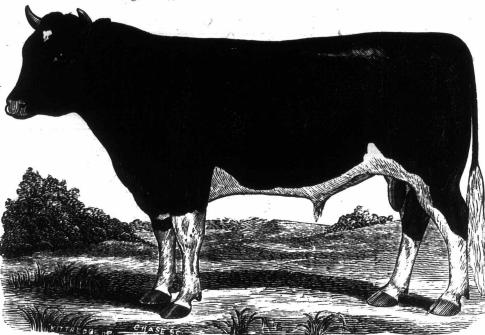
mrawn, and while yet warm, is filtered through a sprig of washed fir tips, the stem of which is inserted loosely and upright in the hole of the funnel The milk deposits hairs, skins, clots, or gelatinous sliminess on the leaves. It has imparted to it a most agreeable odor, and does not readily turn A fresh sprig should be used each time.

Mr. Mechi, the farmers' scientific farmer of England, estimates that fifteen hundred sheep folded on an acre of land for twenty-four hours, or one hundred sheep for fifteen days, would manure the soil sufficiently to carry it through a four years ro-

A New England farmer hired a man who proved very expensive help, as, in a month's time, he dried up the cows nearly a third "simply by kicking and scolding.

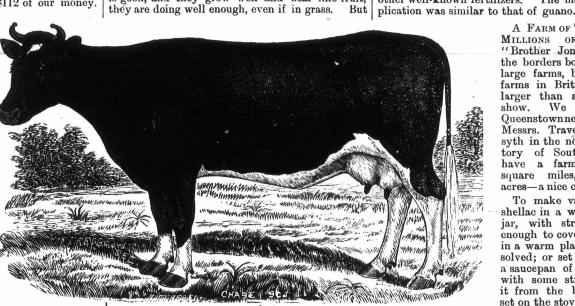
The theory is again confirmed by the experience of the year that pear blight is at least most successfully prevented by culture in sod; by feeding with salt and ashes and keeping the trees well mulched, perhaps with sawdust or ashes is best. Any exposure of the soil to sun and weather has a disastrous effect.

CULTIVATION OF ORCHARDS.—Prof. Beal, of Lansing, is very decided on the matter of orchard cul-



HOLSTEIN BULL, UNCLE TOM

ture for all soils similar in fertility to most of those in Michigan. He says: "If you have money to fool away, seed down your young orchard to clover and timothy, or sow a crop of wheat or oats. If you want the trees to thrive, cultivate well till they are seven to ten years old. Spread ashes, manure Stop cultivating in August, This allows the trees to ripen or salt broadcast. weeds or no weeds. for winter." He a He adds that the question whether to cultivate old orchards or not must be answered by manuring the trees. If the color of the leaves is good, and they grow well and bear fine fruit,



HOLSTEIN COW ISIS

if the leaves are pale, the annual growth less than a foot on twelve-year trees, and the fruit small and poor, something is the matter, and they are suffering for a want of cultivation or manure or both. Prof. B. says that "to judge of the condition of an apple tree is like judging of the condition of sheep in a pasture. Look at the sheep and not at the pasture, and if they are plump and fat they are all right."

FRUIT PREVENTING DISEASE,—We have frequently had occasion to point to the fact that a regular supply of well-ripened fruit tends to preserve health in a family and to prevent disease

arising from malaria. portions of the country should therefore make it a point to plant all kinds of small fruits which come soon into bearing, as well as to set out those sorts of the larger fruits which bear early. We observe a statement in a late number of the Rural World, corroborating this view, from E. A. Riehl, a wellknown fruit grower, who has a supply of fruit for every meal, and his family of seven children are blessed with uninterrupted health, while neighbors, who neglect fruit culture, have had repeated and fatal sicknesses.

THE WHITE PETUNIA AND THE POTATO BUG .-

bugs very much when living in Illinois, and accidentally found out that the fragrance of the white petunia was a deadly poison to them, for when they came near it they would drop dead, and we could gather them up by the shovel full. My idea is to plant the white petunia around the potato plot and scattered through it, as it will settle the bugs. [Important, if true.]

The Editor of the Horticulturist says :- We have known quite a number of instances—indeed so many as to make it quite a rulethat old orchards apparently dying-out have been brought back again to fruitfulness by the liberal use of wood ashes, also stirring the soil. Potash is the most important element in the successful growth of all kinds of fruit trees. An old gentleman told a Club

not long ago that he had known a man make and preserve an orchard of apple trees in a flourishing and productive condition, originally placed on very poor grounds, by sprinkling every year around each tree, to the circumference of the extent of its branches, half a bushel of ashes. We consider this a very important item.

Wheat bran is reported to form an excellent fertilizer, and from containing magnesian phosphates is especially adapted as a dressing for potatoes. Several experiments are reported, in which it is said to have proved of equal value to other well-known fertilizers. The method of ap-

> A FARM OF THIRTY-TWO MILLIONS OF ACRES. "Brother Jonathan" over the borders boasts of some large farms, but there are farms in British territory larger than any he can show. We read from a Queenstown newspaper that Messrs. Travers and Forsyth in the northern territory of South Australia have a farm of 50,000 square miles, 32,000,000 acres—a nice compart title.

> To make varnish, place shellac in a wide-mouthed jar, with strong alcohol enough to cover it, and set in a warm place until dis-solved; or set the bottle in a saucepan of cold water, with some sticks to keep it from the bottom, and set on the stove to gradually heat. Be cautious of fire.

If too thick, add alcohol. Keep the brush in the varnish, with the handle through the cork.—Am. Agriculturist.

THE CHECK-REIN.—There can be no doubt but that a check-rein upon a draught horse is calculated to worry and injure the animal more than all the ordinary labor he is required to perform. If a man has a heavy load to push or to draw, he lowers his head by bending forward, and thus throws the weight of his body against it; and so would a heavy load to be so that the second seco would a horse do, under similar circumstances, if he were permitted.