From the Albany Cultivator.

CHEESE MAKING.

A subscriber who makes a large quantity of cheese, has requested to be informed how some of the celebrated English cheese is made. After having looked over all the principal papers on the subject within our reach, we have concluded we cannot give the information sought, in a better form, than by presenting an extract from the "Report of a Gloucestershire Vale Farm," published by the "British Society for the Diffusion of Useful Knowledge," in the third volume of "Husbandry." The occupant of the farm is Mr. Drinkwater S. Hayward, whose management generally, we should think from the Report, is of the best character :—

Management of the Dairy.—It is acknowledged by every one at all acquainted with the subject, that the quality of cheese does not depend upon the superior richness of the soil or the fineness of the herbage; for cheese of the first quality is often made from land of inferior description, and from herbage of a coarse nature. Nor does the quality of the cheese depend on the breed of the cows, for cheese of the best quality is made from the milk of cows of all the different breeds in the country; we think it principally depends on the manage- of the cows as to their food, &c. of the milk in converting it into cheese, and of the cheese, till it is fit for market.

The following circumstances are injurious to the quality of cheese; allowing the cows to get rank or ill flavoured grass or hay, these conveying a bad flavour to the milk and cheese; allowing the cows to run and heat themselves; driving them far to be milked, which makes the milk froth much in milking; carrying the milk from the place of milking to the dairy; and allowing the milk to remain long after it is milked, before it is set with the rennet.

The greatest dependence is upon the dairy maid; and the chief art of making cheese of the finest quality, lies in her management. The superintendence of the dairy invariably devolves upon the farmer's wife. Mrs. Hayward attends to every minute circumstance in this department, and the following is a report of the information she has obligingly furnished respecting the whole economy of the dairy of this farm :—

The management of a dairy should be conducted with the greatest regularity. Every operation should be performed precisely at the proper time. Either hastening or delaying the execution of it, will cause cheese of an inferior quality to be made of milk from which the best may be obtained. A dairy maid is selected for skill, cleanliness, and strict attention to her business. Her work commences at four o'clock in the morning, and continues without intermission till bed time.

The dairy house should be kept at a temperature of between 50 and 60 degrees; and the dryer it is, the better, as both the milk and cream retain their sweetness much longer in a dry than in a damp air. Every time therefore, the dairy is washed, it is dried as quickly as possible.

The milkings should be as near as possible at equal divisions of the day, commencing at about four o'clock in the morning and three in the afternoon The milking should be finished in an hour. The dairy maid sees that the milkers do their duty, and that all the cows are milked clean; for the milk that comes last is richest; and besides, if the cows are not clean milked, there will be a gradual diminution of the milk, perceptible daily; for these reasons, the greatest care is taken that the cows are clean milked.

The cheese tub being put in its place in the dairy, the ladder is put across it, and a large thin canvass cloth covers the whole tub and ladder, to catch any of the milk that may drop from the pail, and to prevent dirt from falling into the tub. Above this, and upon the ladder, is placed a hair cloth sieve, through which the milk is strained. If the milk should not be of the temperature of 85 degrees, a portion of it is put into a deep tin kept for the purpose, and placed in a furnace of hot water in the wash house, by which means the whole is warmed to the proper degree. It is of the utmost moment to attend to this, for if the milk is not warm enough when the rennet is put into it, the cheese will be 'tender,' and will bulge out in the edge, which spoils its appearance, and a great quantity of sediment of small curd will be found in the whey, which is so much of the curd lost. If, on the other hand, the milk is too warm, it will cause the cheese to 'heave' or ferment, which injures both its appearance and quality. When the milk is sufficiently warm, the colouring matter, (if any is used) and the rennet are put into it, after which, the tub is covered with a woolen cloth for at least an hour. Rennet or runnet is made from the stomaches of calves, here called 'vells.' Mrs. Hayward never uses them till they are twelve months old; for if they are not old, the rennet made from them causes the cheese to 'heave' and become full of 'eyes' or holes. She prepares the rennet from them by adding to every six vells, two gallons of brine and two lemons. The lemons do away with any disagreeable smell, and give the rennet sweetness and agreeable flavour. Twenty or thirty gallons of it are made at a time, as it is found to be much better when made in large quantities. It should never be used till it has stood for at least two months.

When the curd is sufficiently firm for breaking, it is gently and slowly cut with a three bladed knife down to the bottom of the tub, (the knife being about fourteen inches long,) both ways, or at right angles and around the sides of the tub. The cuts should be about an inch apart. When it has stood five or ten minutes, to allow it to sink a little, and the whey to come out as clear as possible, some of the whey is dipped out of it with a bowl, and the curd is cut a second time with the three bladed knife, very slowly to begin with; for if the cutting is done hurriedly, a great quantity of sediment of very small curd will pass through the seive and be found in the whey, and there will also be an increase in the quantity of whey butter, which should have been in the cheese, and the value of the butter thus obtained will not compensate for the loss of credit the cheese will sustain from the abstraction of the butter from it. The cutting being therefore performed very slowly at first, and with the strokes of the knife at considerable distances from each other, is gradually quickened, and the strokes are taken nearer and nearer every time. At last, one hand, with the skimming dish, keeps the whole in motion turning up the lumps suspended in the whey, while the other, with the knife, is in constant motion, cutting them as small as possible; and this operation is continued till no more lumps are brought to the surface, and the whole mass is reduced to one degree of fineness. This process may occupy a quarter of an hour.

The curd is now allowed to stand a quarter of an hour, and being thus sufficiently settled, the whey is taken from it with the bowl, and poured through a very fine hair seive, placed over the whey leads. When the greatest part of the whey has been separated from it, the dairy maid, folding over a portion of it, and beginning at one corner, goes around the tub, cutting the curd into lumps, and laying them on the principal mass, by which operation the mass is carried all round the tub, and most of the remaining whey escapes between the cut fragments as they lie and press upon each other. From time to time the whey is taken from the tub, and put through the seive into the whey leads.

The curd is then cut into vats (hoops) and pressed down with the hands; the vats being covered with cheese cloths about one yard and a quarter long of fine canvass, are placed in the press for half an hour, when they are taken out and the curd cut into thin slices, and put into a mill fixed on the top of the tub, which tears it into very small crumbs, as small as vetches. This mill, which is of Mr. Hayward's construction, is a great improvement in the making of cheese, not only as it saves the dairy maid the most laborious part of the process, that of squeezing and rubbing the curd into small crumbs with her hands, but as it allows the fat to remain in the cheese which the hands squeeze out.

In its pulverized state it is customary with most dairy maids to scald the curd with hot whey; but Mrs. Hayward considers cheese richer when made without scalding the broken curd, this washing the fat out of it. She, therefore, without scalding it, puts it into the vats and presses it closely together with the hand in filling them. In making the double Gloucester cheese, particular care is taken to press any remaining whey from the curd as the vats are being filled, and they are filled as compactly as can be done with the hand, being rounded up in the middle, but just so much so that the whole can be pressed into the vats. Cheese cloths are then spread into the vats, and a little hot water is thrown over the cheese cloths, which tends to harden the outside of the cheese and prevent it from cracking. The curd is now turned out of the vats into the cloths, and the vats being dipped in the whey to wash away any crumbs or curd that may cling to them, the curd is inverted, and with the cloth around it, is again put into them. The cloths are then folded over and tucked in, and the vats, as they are filled, are put into the press one upon another. The bottoms of the vats are smooth and a little rounded so as to answer the purpose of cheese boards, which, therefore, are only wanted for the uppermost vats, or when the other vats are not quite full. The vats are allowed to remain under the press about two hours, when they are taken out and dry cloths are applied, which with double Gloucester cheeses, should be repeated some time in the day.

Salting, and Salting Presses.—The vats, when the clean cloths are given, as just mentioned, are changed from the single press to the one next to it, and placed in it, one upon another, as before. They remain in this press till the cheeses are salted, when those made in the evening, take the place in the press of those made in the morning, and those made in the evening, are in their turn displaced by those made the following morning; the cheeses of the last making, being always placed lowest in the press, and those of the other makings, rising in it according to the priority of making. [From this, we infer that a beam press is used, into which several cheeses may be put at once, the older ones which require the greatest pressure being put nearest the fulcrum.] This order is also observed in the other two presses, the last, or newest making in each, being lowest, and each making having next above it that which was made last The cheeses pass through the three presses in this order, advancing a step in their progress at each 'meal' or making, till, at last, in four or five days, they come out of the presses and are put on the shelves. They are generally salted at the end of twenty four hours after they are made, though this is done by some at the end of twelve hours. The salting should never be begun, till the skin is all closed, for if there be any crack in the skin of the cheese at the time of salting, it will never close afterwards. The salting is performed by rubbing with the hand both the sides and the edge of the cheese with finely powdered salt. The cheese, after this, is returned to the vats and put under the press, care being always taken according to what has been said, to put the newest cheese lowest in the press, and the oldest uppermost. The salting is repeated three times with the single and four times with the double Gloucester, twenty four hours being allowed to intervene between each salting. After the second salting, the cheeses are returned to the vats without the cloths, that the marks of the cloth may be entirely effaced, and the cheese may get a smoothness of surface and 'keenness of edge,' which is a peculiarity of Gloucestershire cheese. The double Gloucester remain in the presses five days, and the single, four; but in damp weather, they should remain longer, The quantity of salt generally used is about three pounds and a half to a hundred weight of cheese. The size of the double Gloucester cheeses is commonly about five to the hundred, or twenty pounds each,