

or cellars, it is readily kept through the winter. An acre of turnips of good quality and weight will generally go much further in sustaining or adding to the weight of an animal than the same acre under hay. Especially this is the case when mixed food—or turnips and hay, or chopped straw and tail or light corn—is given to the stock. Without cultivating more land therefore—at least as regards the same surface of land which now yields the winter's hay—a sufficient supply of food in the form of turnips may be raised to enable the farmer to adopt the more generous system of feeding I recommend; and instead of diminishing the number of stock, the general introduction of green crops, as winter food, will enable the Province both to enlarge the existing numbers upon every farm, and to feed them more abundantly also.

c. The use of what is called prepared food, is also a means of improvement which deserves the serious consideration of the New Brunswick farmer. The oily seeds, such as linseed, are a most valuable food for animals, and an admixture of them with the other fodder, is not only beneficial in itself, but enables the farmer also to use up easily and profitably the straw of his grain crops in sustaining his cattle, and to convert it at the same time into more profitable manure.

In the present condition of agriculture in New Brunswick, I do not recommend the Provincial farmer to purchase linseed as the British farmer does for the purposes of feeding and fattening his stock, and for the production of a rich manure for his corn fields. But the growth of a small proportion of flax upon his farm, besides yielding the fibre upon which in the winter season the members of his household may employ their leisure hours—will furnish him with a quantity of seed which will greatly benefit his stock, and which will enable him to adopt with profit the more artificial system to which I am now referring. To give an idea of this method, and of the practical results obtained from the adoption of it, I make the following extracts from my published Lectures on Agricultural Chemistry:—

"The method adopted is to crush the linseed, to boil it by a steam heat for three hours with two gallons of water to each pound of the seed, and then to mix the hot liquid with chopped straw and tail corn in the following proportions:—

Linseed,	2lbs.
Cut straw,	10lbs.
Ground corn,	5lbs.

This quantity is given to each full grown beast per day in two messes. The liquid is poured upon the mixed corn and straw on the floor of the boiling house, is turned over three times at intervals, and at the end of two hours is given to the cattle. They have two hot messes a day, and are fed punctually at the same hour.

The times of feeding are, turnips at 6 in the morning, prepared food at 10, turnips at 1, and prepared food again at 4 in the afternoon. The allowance of turnips is 60lbs. of Swedes per day, or 75lbs. of Hybrids, or 112 of Globes.

Under this system the cattle thrive remarkably, are still and quiet, lie down the greater part of the day, and though they cause a large outlay at first in the purchase of linseed, they amply repay it in the value of the dung, and in the higher price they return for the turnips and the tail corn, than could be obtained in any other manner.

Turnips when employed alone are by practical men in the southern part of the Island seldom valued at more than \$5 to \$8 a ton for feeding sheep or cattle. But by feeding his sheep in sheds, and pulling the turnips for them, Mr. Huxtable finds that a week's food, consisting of—

119lbs. of Swedes	} give 24lbs. 4 oz. of Mutton,	
7 pints of Oats		(dead weight.)
7lbs of oat-straw		

from which he calculates, at the average price of mutton, that his turnips used in this way pay him \$17 6d. a ton, exclusive of the value of the dung. He states also that similar results by his methods may always be obtained.

The admixture of corn therefore, and feeding under cover, seem in his hands to have largely added to the value possessed by the turnip when used alone and eaten off in the field."

It is not necessary, in adopting this method, that the precise details above given should be followed out—that the same quantity or proportions of the several kinds of food should be employed—or that the crushed linseed should be boiled by steam heat. The principle of adding turnips to the hay usually given to the cattle and sheep, and to both a certain quantity of linseed boiled long enough to form a jelly when it cools, mixed up with chopped straw, and brought to the stock either cold or hot,—this is what the farmer may in nearly all circumstances profitably adopt.

The use of oil cake—the cake which remains after the linseed is crushed and deprived of its oil in the mill—is attended by benefits to the stock, similar in kind to those which follow the use of the linseed itself. For this purpose it is employed to a very large extent in England.—It fattens fast, it enriches the manure, it causes the milk to yield more butter, and it only requires to be broken in small pieces before it is given to the oxen, to the milch cows, or to the sheep. It is not so rich in oil however as the original seed, and cannot be made into a jelly for the purpose of mixing with the chopped straw, rendering it thus palatable to the cattle, and converting it more easily into manure. Nevertheless, should flaxseed ever be grown in the Province, or imported in sufficient quantity to keep an oil mill in operation for the manufacture of oil for Provincial use, the oil cake produced might be advantageously employed by the raiser of beef or butter.

From what I have already said, it will be gathered that the use of linseed will promote not only the growth of young stock and of calves which are to be reared, and the fattening of full grown beasts, and of sheep, but will add also to the produce of dairy stock in milk, in butter and in cheese.

2. Remarks on the second Table, (Yield of Butter, &c.) In regard to this Table, it is to be regretted that the annual produce of milk is not included in the returns.—It appears however, that when the cows are kept altogether

for dairy purposes, the annual produce of cheese or butter does not exceed, from a single cow, 120 pounds of butter or 160 pounds of cheese; while the average of all the returns is, 90 pounds of butter and 140 pounds of cheese. The average weekly yield in summer is greater, amounting as the Table shows, to about 6 pounds of butter and 11 pounds of cheese. Were the cattle properly fed therefore, they ought to afford a much larger annual supply of dairy products. The winter feed in the Province has hitherto been too scanty and too little adapted to the production of milk, so that after supplying the wants of the farmer's family, little has usually remained over for the manufacture of butter or cheese. Coming as they are said to do in a great measure from the old Alderney and Jersey stock, the now native breeds ought to retain still good milking propensities.

Cheese.—The average yield of whole milk cheese in Cheshire is about 3 cwt. (336 lbs.) a year. This it will be seen is greatly less than the 600 or 800 pounds which the entire milk of good cows ought to be able to yield. But this is accounted for by the making of butter to a considerable extent instead of cheese, during the cooler part of the year. In the State of New York in 1844, about a million of cows were milked, and the average yield of cheese was estimated at 110, and of butter 79 1-2 pounds for each cow. The former weight is 30, and the latter exactly 10lbs. less than the average yield of cheese and butter in New Brunswick, according to the Table on page 97. In this branch of husbandry therefore, as in the production of grain, New Brunswick as a whole, notwithstanding its obvious deficiencies, is still not so far behind as New York on the whole.

There are however evidences of improvement, and of a desire to push the dairy husbandry of New York, which are worthy of imitation in New Brunswick. Among the returns contained in the Table representing the yield of butter and cheese in this Province, there is only one—that of Mr. John Smith of Westmorland—which estimates the annual yield of dairy produce (cheese I suppose,) as sometimes amounting to 224lbs. (2cwt.) from a single cow. But according to a paper by Mr. Benjamin Johnston, then President now Secretary of the New York State Agricultural Society, contained in the transactions of that body for 1846, the average produce of cheese for the whole County of Herkimer, in that State, amounts to 226lbs. for the Town of Fairfield in that County, 350lbs. and in some single dairies in the same County even to 680 pounds per cow. The annual average in the dairy of Mr. Aloazo L. Fish, for example, was for three successive years 680 pounds per cow, and in one of these years 714 pounds of cheese from each cow.

Butter.—In the transactions of the same Society for 1848 an account is given of the dairy of Mr. Holbert in Chemung County, which consists of forty cows, from the milk of which he made 6500 pounds of butter in 1847—being an average of 160 pounds from each cow. This is greatly above the average of 79 1-2 pounds obtained for the whole State in 1844. Still it is very far from the weight which a good cow, well treated, ought to yield.

In Ayrshire it is common for a good cow to give 260 pounds of butter, and cows of superior quality yield still larger returns. Very much of his profit indeed depends upon the selection of the dairyman's stock, as some cows will consume far more food than the value of the milk they yield, while others will pay for their keep, and leave a large profit besides. This fact is brought out very strikingly by a statement of Mr. Holbert, whose produce of butter I have quoted, "that one of his best cows will make as much butter as three of his poorest, giving the same quantity of milk;" and "that one hundred pounds of milk drawn from his best cows will yield one pound more butter than one hundred pounds taken from the whole herd."

The quality of her milk therefore is of as much consequence as its quantity, in judging of the dairy qualities of a cow. But this quality depends much upon the feeding, in regard to which, as well as to the quality of the stock, there is a great room for improvement in New Brunswick. To this point I shall return.

(To be Continued.)

THE CIRCUIT COURT.—The business before this Court is progressing rather slowly, a number of tedious civil cases having occupied the attention of the Court for a much longer time than usual, but 18 have been disposed of, leaving 37 for trial. The attention of the Court has also been taken up with the criminal business, which has been nearly got through with. The following are the sentences:—Thomas Teague, convicted for two separate larcenies—three years in the Provincial Penitentiary, with hard labour. James Flood and James Hayes, for highway robbery—three years in the Penitentiary, with hard labour. Lavinia Tearney, for larceny—three years in the Penitentiary, with hard labour. Thomas Crawford, for a felonious assault, ill-using, and attempting to murder his wife—five years in the Penitentiary, with hard labour. John White, for three separate cases of larceny—three years in the Penitentiary, with hard labour.

Besides the above, four have been tried and acquitted; one case, that of John Burke, for assaulting a Policeman, stands over for the January term; and four others remain to be tried.—*New Brunswick.*

DESTRUCTIVE FIRE.—About 9 o'clock on Sunday evening, a fire was discovered on board a new Ship of about 800 tons, on the stocks in Mr. Fisher's Building Yard, Lower Cove. The fire was first seen by the sentry on duty at the Government Stores, who immediately gave the alarm, but so quickly did the flames spread, that before the engines could arrive at the spot the ship was in a complete blaze. An old dismantled brig called the Joseph Hume, lying in the adjoining dock, also took fire, and was nearly destroyed. Owing to the great exertions of the Artillery Engine and our City Volunteer Engine Companies, the fire was prevented from extending any further, although at one time it was feared that the Government Stores and the buildings in the vicinity would fall a prey to the flames, in consequence of the scarcity of water, the tide being nearly low at the time. The Ship was nearly

finished, and Mr. Fisher's loss is therefore very heavy, he having, we regret to say, no insurance on her. The fire is generally thought to have been occasioned by design, as it spread so rapidly after its first discovery, and it is difficult to account for it in any other way.—*Id.*

BALL PRACTICE.—A soldier of the 19th Regt., named Samuel Hughes, while on sentry at the Commissariat Office, at half-past one o'clock this morning, fired at three Policemen who were passing in front of Mr. Bradford's door on their way up St. Lewis Street, and then left his post and rapped at the door of the St. George's Hotel and demanded liquor. Upon being refused, the bar being closed at that hour, he fired through the door, when he was arrested by the guard, who were led to the spot by the policemen first fired upon. The ball of the first shot has been extracted from the wall opposite Bradford's corner, and the second lies embedded in a cupboard in the passage of the St. George's Hotel.

He was brought before the Police Magistrate this morning and was committed for trial.

He was not under the influence of liquor at the time he fired, but it appears he had been very intemperate for some time previous.—*Quebec Gazette, 19th ult.*

PROFESSOR WEBSTER'S FAMILY.—A paper has been circulated, during the past week, among the more wealthy of our citizens, to raise the sum of \$20,000, to give to the wife and children of Professor Webster, to provide for them, and place them above want during life.—The paper is headed by Mrs. George Parkman, wife of the murdered man, with the sum of \$500. The subscriptions have already nearly, if not quite, reached the proposed amount.

Mr. Andrews, the jailer, says that Dr. Webster, in his opinion, will hold out firm to the last—that he has not eaten so heartily for some time past. His family visited him during last week, and remained with him until six o'clock. They are not aware of the exact time of execution, but know the day to be fixed. No persons are allowed to visit him, except his family, and clergymen for spiritual purposes.—*Boston Mail.*

THE TRAGEDY OF THE THIRTIETH.—We learn that there have been some 500 applications to Sheriff Eveleth for places at the execution of Professor Webster on the 30th. The religious ceremonies antecedent to the execution will take place in the prisoner's cell and the adjoining lobby; and the prisoner will be accompanied to the gallows by the officers of the law only.—*Boston Transcript.*

Sheriff Eveleth, of Boston, has issued a formal invitation to certain persons designated to attend "the execution of John W. Webster, on Friday the 30th instant, at 8 o'clock, A. M. at the Jail in Leveret street, in Boston."

The new three cent piece, recently issued at the Philadelphia Mint, have on one side the words "United States of America," in which is a circular wreath, enclosing the numerical "111." On the obverse side is the Liberty cap, inscribed with the word "Liberty," and surrounded with rays. Underneath the cap are the figures "1850."

The Bishop of Jamaica, and Lady Elgin and suite, with 125 other travellers, took lodgings on Monday evening at Congress Hall, Saratoga.

CAPTIVE LADY AMONG THE CAMANCHES.—It is stated that a trader among the Camanche Indians has discovered, in a camp of that nation, a white woman, fair and comely in appearance, who is intermarried among them, and says she is the sister of Lieut. Love or Lovett, who commanded a train which left Independence, about three years ago, for Santa Fe; that she was in company with the party when it was attacked by the Camanches, and that her brother was badly wounded, a large number of the men were killed, and she, with a number of men, were carried off prisoners by the Indians. She says she is well treated by her husband, but the women are cruel to her.

THE UNITED STATES AND PORTUGAL.—The difficulties with Portugal have been amicably settled. Portugal allows all the American claims with the exception of that growing out of the destruction of the General Armstrong which is to be submitted to arbitration.

FASHIONABLE LIFE.—It is said that a gentleman of New York, will leave Saratoga some \$100,000 worse off than when he went there. He had cultivated too close an acquaintance with the black legs.

POPULATION OF BALTIMORE.—Baltimore City, by the new census, is said to contain a population of 160,000—a gain of 50 per cent. in ten years.

CINCINNATI.—The deaths in Cincinnati from June 1st to August 16th, were 3912: 1400 by cholera, and 1520 being children under 5 years of age.

The coinage of the Philadelphia mint has averaged two millions per month, and in July, was two millions six hundred thousand dollars. The coinage for the year there, it is stated, will be \$30,000,000.

THE CHOLERA AT HAVANA.—We are sorry to learn by the steamer Tay, that the Cholera continued to rage at Havana to a most alarming extent. It had already carried off thousands of people.—*Bermuda Gazette.*

BELIZE, HONDURAS, July 16.—It is estimated that ten million M. of mahogany will be shipped this year. Cochinal, indigo, sarsaparilla and turtle shell will be light crops.

EXPLOSION OF THE AMERICA ON LAKE ERIE.—A telegraph report received last evening from the town of Erie on Lake Erie communicates the following melancholy intelligence, "This morning, whilst off Barcelona on her downward passage, the steamer America collapsed her steam chest, instantly killing one of the Assistant Engineers and two other persons, as well as dreadfully scalding several, 25 of them mortally."