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The Middlebury Register.

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The proprietors would say, all first class medicines have their imitations, and they would CAUTION the public against imposition by having other medicines thrust upon them in place of these admirable Tablets,
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References given to Engines now in use in all parts of New England States. Full supply of all sizes Portable and Stationary Engines and Steam Pumps, ready for immediately delivery. Engines and boilers set up when desired.
HEATING AND VENTILATING DEPOT., U. S. Senate, Nov. 12, 1870.
To the Norwalk Iron Works:—It affords me pleasure to state, that the 12x24 Balance Valve Engine recently sent up by you in this depart, for the purpose of driving two large exhausting fans has fully demonstrated its superiority over the slide valve Engine used in both wings of the Capitol. The large percentage of power required to work the ordinary slide valve is almost entirely obviated, and is clearly shown that there are the following important considerations in connection with the use of your Engine, namely: Economy of fuel, regularity of speed, simplicity of construction, superior workmanship and grace of design. I cheerfully recommend them as being the best Engine that has ever come under my observation,
Very respectfully, H. F. HAYDEN, Chief Engineer, U. S. Senate. (45w4)

Butter Making.

Address before the second winter meeting of the Vermont Dairymen's Association held at Burlington, by Francis D. Douglas Esq. of Whiting.

MR. PRESIDENT, LADIES AND GENTLEMEN:—We live in an age of progress. Substantial evidence of this fact, may be found in nearly every department of civilized society. The laws which govern the material world, were never more thoroughly investigated, and the knowledge of their existence, and operation, so universally diffused as at the present time. We see around us, on every hand, the practical application of this knowledge to the wants of man. New discoveries in physical science, are daily occurring, and their application to the varied industrial callings of man, are constantly developing more perfectly, those natural resources by which his wants are supplied, and alleviating the burdens of his toil. At our present rate of progress in this direction, it would seem that that decree of the Almighty, that man shall "till the soil by the sweat of his brow," would soon be annulled by human ingenuity. Intense mental application to the various callings of life, is the characteristic of the age, as plainly evinced by this rapid progress. In every department of business, clear heads, as well as strong arms, are at work in this great cause of physical improvement. And he who does not bring to his aid in any calling, a good degree of mental activity, who fails to improve his skill by mental application, will most surely find himself excelled by his neighbors, his profits diminished, his wares inferior both in quantity and quality, and himself experiencing that disgrace which attaches to stupidity, and want of thrift in any pursuit. And Gentlemen, the calling of the dairyman, is no exception to this fact. This progressive spirit is at work around us, developing and improving this branch of industry, and we of Vermont, must not be found wanting in this spirit, if we would not experience these results.

OUR NATURAL ADVANTAGES.

Nature has furnished us with all the requisite elements of success. in this calling. In our pure air, our green hill sides, covered with such a variety of native grasses, our fragrant clover fields and excellent meadows, our clear streams, and never failing springs of sparkling, ice cold water, are those elements of success, by the use of which, if we will but properly develop them, we may safely challenge the world, to excel us in the excellence of our dairy products.

In those elements, when thus employed, are hidden mines of wealth, which for all the purposes of human happiness and social development, surpass in value the mineral treasures of California.

IMPORTANCE OF DAIRY FARMING TO VERMONT.

The good results of industrial improvement, are not confined to the mere enhancement of private gains. But beyond this they have an important influence upon our social progress, and the prosperity of the State. With us, where the objects of industrial pursuit are limited, where owing to circumstances we have no extensive commercial, mining, or even manufacturing interests, upon which to rely for the means for our social and political advancement, it is a matter of vital importance, that we should improve to the uttermost, those advantages which we do possess. Mr. President I trust that the organization of this Dairymen's Association, will result in thus improving this most important branch of our industry.

What intelligent observer of events, has failed to recognize the fact, that the dairy business, and the breeding of horses, are two departments of agriculture, by which the Vt. farmer can most reasonably hope to compete successfully, with the agriculturalists of other states.

The cheap transportation of one day, has seriously affected many of the farming interests of Vermont. It has brought us competitors from the great West, and even from more distant regions, with whom we can not compete in many of those branches, once successfully pursued among us. If we make the production of beef a speciality, we find that the herdsmen of Texas, can under sell us in the markets. For this reason also, the farmers of Ill., can supply them with grain and pork, more cheaply than we can do it ourselves. In these staples, we can only hope to compete with the west, by their production in connection with dairy farming. In sheep husbandry also, this influence is seriously felt. The flock masters of distant climes, have virtually driven us from our own wool markets, and this once lucrative branch of Vermont agriculture, is no longer remunerative. In consequence of this, those sheep which the enterprise, and skill, of Vermont husbandmen have bred to a degree of perfection before unknown, are now a drug in the market.

Shall we fail to heed these signs of the times? Shall we not accept the situation, and prepare for a successful competition with the world around us, in those branches, which circumstances point out, as the ones in which we can most reasonably hope to succeed and excel? I trust that the dairymen of Vermont at least will not be found wanting in that intelligent perseverance, and enterprise which alone insures success.

MEANS WHICH WE SHOULD EMPLOY IN DEVELOPMENT OF OUR NATURAL RESOURCES.

The great question for us to determine is, how we can best develop our natural resources, and cause them to yield, not only the greatest profit to individual enterprise, but also promote the highest prosperity of the State, which is but the sum of individual success.

The answer is obvious. As in all other departments of business, superior individual skill, can only be attained by superior mental application and research, by the use of more brain work, than our neighbors bestow upon the same calling. Superior individual success, depends not alone upon the possession of greater natural advantages, but also, upon the diligence with which we apply those superior mental deductions, to the various details of our business.

That uniform skill, so desirable among the members of a calling like ours, in consequence of which the reputation of the wares of any particular section, is improved and advanced, above that of the wares of the same class, in other sections, is only attained by the diffusion of the knowledge acquired by individual application, among the masses. This can best be accomplished by organized effort, by public and private discussions, by the free communication, and publication, of those isolated facts derived from personal experience.

There are many subjects pertaining to this business, of a scientific and intricate nature, the investigation of which, though best pursued by individual application, is necessarily attended with so much trouble, loss of time, and expense, that the farmer of ordinary means, whose attention is wholly occupied, as is usually the case, by the demands of business, can not afford to investigate them. This should be accomplished by associated effort, and those questions settled, by repeated experiments, and the application of such thorough tests, that the results when reached can not longer be matters of doubt. The mental deductions of individuals of experience even, are not always correct, and their practice in consequence is often defective. But by discussion and comparison with the opinions and practice of others, such errors are rectified, and uniformity in practice, and products, established between them. Much work of this nature remains to be done among us, before this uniformity can be established, and the quality, and reputation, of our butter so improved, that it will uniformly command the highest prices in the markets and return the highest attainable profit to its producers.

PRESENT ATTAINMENTS IN THE ART IN VERMONT.

In the art of butter making, especially, this work is imperatively demanded. That progressive spirit to which I have alluded, has scarcely commenced its work of improvement, among us, in this branch of industry. Wherever it is plainly manifested, its results are apparent. The wares of the individual, or community, where it predominates, and is intelligently practiced, invariably improved in quality and advance in reputation. They are sought for by the best customers in the markets, and often command a price many times greater, than the opposite extreme in quality.

Do the pecuniary returns, received for Vermont butter, indicate the possession and practice of this spirit, on the part of a vast majority of its producers? In the department of cheese making, it is evidently at work among us, and with truly gratifying results. But are not the details of butter making now practiced by the mass of Vermont butter makers, precisely the same as those practiced by their fathers fifty years ago? Where slight improvements have been made, is not the system, or rather want of system, almost invariably the same? Had our fathers then reached that degree of perfection in the art, which rendered improvement impossible?

The earnest calls for a better article which come to us from the markets, the eagerness manifested by consumers to obtain the best, the extreme prices paid for the choicest articles when found, all attest the fact that the intellects of the intelligent dairymen of Vermont, have not been thoroughly aroused to the wants, the necessities, of their calling.

Let it not be understood, that I admit that we are behind the world around us, in this matter. I speak of Vermont practices and products, only because I am speaking *to* Vermonters, and for the *benefit* of Vermonters. These remarks, will apply with equal force to every other section of the country, with a few limited exceptions. The well established character of the Vermont farmer for enterprise, should place him in the front rank in this department of agriculture, as it has already in many others. It should not allow him to rest contented, with mere mediocrity in his attainments in this direction.

It is a matter of reproach to Vermont dairymen, that while a strictly prime article of butter will sell in Boston Market for one dollar per lb., the great mass of our butter does not sell for scarcely one third of that sum, I have seen in that market, within the last month, butter which was manufactured in December, for which the dealer paid the producers one dollar per lb., and sold the same to the consumer for one dollar and ten cents per lb., while our best, fall made, Vermont butter, was selling in the same market for less than *one half* that sum.

Now it matters not to the producer, or to us, whether that article was really worth as much more to the consumer, than our Vt. butter, as the price paid would seem to indicate. Or whether the extra price received, was in consideration in part, of the known uniformity and excellence of his products, for which consideration the consumer was willing to pay.

The fact that our neighbors of Orange Co. N. Y., receive nearly twice as much per pound for their butter, as we of Vt, is just as much a matter of reproach to us, if one half of the extra price which they receive, is plainly in consequence of the superior reputation of their butter, if that reputation is based upon its actual and known uniformity. If the confidence of the consumers in this uniformity was destroyed by sending the *same butter* to market indiscriminately with an equal amount of poorer grades, this extra price could not be obtained. Like poor Tray, it suffers when found in bad company. Every pound of *poor* butter which goes to market from Vt., thus affects indirectly, the interests of those who produce a superior quality, and sell in the same market.

The advantages of a good reputation, are universally admitted, and acted upon in every department of manufacturing business. And in no other, are its beneficial effects more valuable to its possessor, than in that of butter making.

The aggregate loss to the dairymen of this state, in consequence of the inferiority of one half of their products, the want of uniformity resulting therefrom, and the consequent loss of the benefits of a superior reputation, amount to tens of thousands of dollars annually. A waste which is unnecessary, and which we cannot afford to lose. Improve the quality of this poorer half until it shall equal that of the Orange Co. product, and there is no good reason why there should not be an increase of nearly one-half in the aggregate receipts for our butter. And what but the want of skill and enterprise, on the part of its manufacturers, will prevent this improvement. Is there any other possible reason, why our entire product should not reach as high a standard of excellence, as that of Orange Co. or any other section of the country?

By the adoption of an improved system of management and manufacture, the amount of butter produced per cow, may also be greatly increased, while the expense and labor attending its production can be very much reduced. Who that has carefully investigated this subject, has not become convinced that in almost every ramification of the business, from the selection of the cow, to the marketing of the butter, there is a chance for improvement, that unnecessary waste and loss occur by the modes and facilities now employed, in nearly every detail of its production?

I propose to point out some of those defects in the present practice among us, to show in what stages of the process some of these wastes occur, and suggest the remedies, which in my opinion, may safely be adopted. And in so doing, I am well aware, that I shall be very liable to advocate erroneous ideas, though presenting only those suggestions which I have thoroughly tested, by actual practice. But I speak to men of intelligence and experience, and I trust that my failings even, may result in good, by provoking discussion, and calling out facts with regard to those points which will establish the right, and expose the error.

SELECTION OF COWS.

And first, let me inquire, what is the common practice among us with regard to the selection of cows? How many dairymen know the comparative merits of the different animals of their herds for butter-making purposes? It is a well known fact that many cows which give a large quantity of milk, are nearly worthless for this purpose, yielding but a small amount of cream, and that of a miserably poor quality. That it is impossible to make a prime article at any season of the year, from the white, thin, oily cream which such cows produce. I suppose no intelligent dairymen denies this fact, and yet is not the *quantity of milk* which a cow gives still made the test of excellence by the great mass of dairymen in this State? I have not yet found the man who has instituted a thorough and accurate investigation with regard to this point, and thoroughly culled and selected his herd by the standard of *quality and quantity of the butter* produced, by the individuals of his herd. Here may be found a heavy item of that waste to which I have alluded. Suppose the manufacturer of fine cloths should show a like want of care in regard to the mechanism of the looms and other machinery with which he manufactures the fabrics which he sells in the market. Could he compete successfully with his more thorough and enterprising neighbors, whose first care is to select the best machinery and material, and avail themselves of all the improvements which will aid them in the prosecution of a successful competition? Is not a like neglect in our business sure to be attended with like results? If that machine, the cow, which elaborates the milk from which our butter is made, is imperfect and worthless for that purpose, no amount of skill which our wives or dairymaids may possess can overcome this fundamental defect. While the question of breeds is very important, I apprehend that this question of individual merit is more so. While the individuals of the best breeds are not uniformly prime animals for this purpose, there is no breed that does not produce some good ones. And whatever our breed of cows, this careful scrutiny of individual merit is absolutely necessary to ensure the most perfect success.

FOOD.

Another serious defect in present practice, which affects greatly both the quantity and quality of our butter, is the neglect to provide suitable food for our cows, especially during those protracted seasons of drouth which often occur in the summer months. Now it is a matter of fact, that just as good butter and as much of it, can be made in July and August as in the next two succeeding months, if this matter of food is properly attended to. It is also a matter of fact that neither a prime article nor a large amount of it, can be made during such seasons, when the cows receive only the food which they find in the dried up pastures upon which they usually range. The butter made under such circumstances must necessarily be white and poor, and also small in amount.

That system of renovation which should be practiced on every farm in Vermont where the surface will admit of plowing, will furnish the food requisite for such emergencies, at as cheap a rate as any other food which they consume. That worn out pasturage which may be found on nearly every farm, when properly plowed, top-dressed and restocked with early and late varieties of clover, furnish just the food required on such occasions. While the improvement to the farm resulting from this practice, more than repays all the extra expense attending it. And when the latest variety has matured, what food can be furnished more cheaply to take its place and bridge over" those seasons of famine, than that produced by a crop of sowed corn, even if the improved quality of the dairy products are not considered? What is not needed of these crops in the summer and early fall is almost as indispensible, if well cured, when the frosts have withered and bleached the grasses, and the juiceless herbage of the pastures and meadows begins to impart that colorless, wintery appearance to the butter, which always characterizes it when the cows are fed upon such food.

If this system was practiced more extensively among us and our cows supplied throughout the milking season with an abundance of green, succulent food, such as I have named, and also pumpkins, roots, and doubtless many other substitutes for green pasture grasses will these fail, it would result in a vastly increased production in proportion to the number of cows kept, and also in a like improvement in the quality of those products. Would not the present profits and future prospects of the butter makers of Vermont be greatly improved by the general adoption of such a system?

WINTER MANAGEMENT OF COWS.

The care which the cow receives is nearly as important as the food she eats, and we should adopt that system of management which will secure the most perfect health and promote the most perfect development. In determining what this system should be, we should obviously be guided by those laws of nature which govern the animal economy, only by the observance of which we can maintain that perfect health so indispensible to success.

And gentlemen, I believe it to be a question worthy of our careful consideration, whether our present system of stabling cows is in accordance with these plain requirements of nature. I am aware that the practice of closely confining cows in winter is almost universal in cold climates and among the best farmers, but I hold that we should allow *only* those practices of the world around us, whether of one individual or ten thousand, whether in business or morals, to influence our course which we believe to be founded upon sound principles. That while we should respect the honest opinions of others, and the usages of the past and present, no man of mature mind should accept these opinions and usages as his guide without first examining the reasons upon which they are founded. Has not the extensive practice to which I have alluded been accepted without this proper investigation? I propose briefly to point out what I believe to be the defects in our present practice in this respect, and suggest a remedy.

And first, let me inquire, do not the laws which govern the animal economy require perfect freedom in regard to food and drink, exercise and rest? And for the cow as well as most other animals, pure air and cleanliness, the avoidance of sudden changes in temperature, and both extremes of heat and cold. Require light, and in our cold climate the enjoyment of the greatest possible amount of sun shine during the winter months? We cannot reasonably hope to attain the highest success, while we violate these plain requirements of nature, the sum of which is, that we shall render the situation of our animals as perfectly comfortable as the circumstances of the case will admit, and remove from them as far as possible all causes of irritation. Does the common practice of stabling cows secure this? Is it not rather a direct violation of all those conditions of success?

No one will deny that exercise is essential to health, and why should we confine our cows during eighteen hours of the day, especially during that critical period of pregnancy when nature most demands it, and when too, we are so often warned of our mismanagement in this respect by what we call "bad luck?" Pure air, we all grant, is essential to health, and why deprive our cows of it by confining them in the warm, foul air of filthy stables? A uniform temperature also is essential. Why turn them from a warm crowded stable, where the heat of their bodies and breath raise the temperature to above the freezing point, as often practiced, into the biting blasts of a Vermont winter, whose temperature is often five or ten degrees below zero, and oblige them to remain until thoroughly chilled, and if they drink at all to drink while thus exposed from icy fountains all that they are permitted to do in each twenty-four hours?

All irritating causes should obviously be avoided. Why confine our cows like criminals in the stocks, condemn them to pass three-fourths of their time during our long winters yoked by the neck, as practiced by many, in that restrained uncomfortable position, much like that which civilized society has long since condemned as too barbarous a practice to be tolerated among men, even for the punishment of crime?

When left to choose for themselves, they will never select a hard, unyielding surface upon which to lay down and rest. Yet how many farmers oblige their cows to lay upon bare stable floors, not even affording them the litter necessary to make their situation more comfortable than it would be upon the smooth surface of a rock, which in their summer rambles they would carefully avoid?

Why, too, should we restrain them from obeying that instinct, which teaches them to avoid filth, and oblige them to besmear themselves in a manner, against which, even their brute nature rebel? To carry about upon their sides and flanks, the evidence of man's cruel restraint?

That practice too, of milking cows thus besmeared, is simply detestable! And the butter produced, is often more detestable than the practice, in spite of the utmost care and skill of the dairymaid.

Another objection to the practice of stabling, is the great amount of unnecessary labor which it requires, and that of the most unpleasant nature. It is a matter of surprise to some, that so many of our farmer's sons should abandon the occupation of their fathers, and seek employment in other departments of industry, while poets sing of the pleasures of the farmer's life,—of "bleating flocks, and lowing kine." But I tell you gentlemen, there is no poetry in the milking of cows in filthy stables; in the daily cleaning of those stables; or in wallowing through those mire holes of corruption, which disgrace the barnyards, even of some of our most intelligent farmers. And I confess, that I admire that youth whose aspirations point him to nobler pursuits than these. And if it were necessary, as boys too often suppose, that the sons of many of our dairy farmers, should follow the example of their fathers in these respects, if there was not a vast field for improvement in the business, where their intellectual faculties could be exercised, and developed, while in the intelligent pursuit of it, I would counsel those, whose superior natural abilities, incite such aspirations within them, to seek some other calling. But happily the occupation of the dairyman is susceptible of greater improvement, than almost any other calling in the land.

By mental application means may be devised, by which its most unpleasant features may be removed, its labors lightened, its products increased and improved, their reputation for perfection extended, and established, its profits increased, and the calling elevated from one of monotonous drudgery, and slavish toil, to a pleasant, honorable, healthy employment, from which the worthy sons of those engaged in it, will not wish to flee. And I apprehend that the most important step towards the realization of this "good time coming," will be the substitution of a better system for the winter management of our cows, than the one in question.

I am aware, that many of the objections to which I have alluded, do not necessarily attach to the practice of stabling. Some of these objections may be, and are, in the practice of many greatly modified. But notwithstanding this, I hold that the system is radically defective. And if it were not for that provision of nature, which allows the animal economy within certain limits, to accommodate itself to unnatural circumstances, we should see more plainly its evil effects.

Those cattle plagues which afflict Europe, I believe to be as plainly traceable to that system; to the use of foul, crowded, ill-ventilated stables, as were the human plagues of ancient London, to its narrow, filthy, streets, and the dark, ill-ventilated abodes of its inhabitants.

But before we decide to abandon our present practice, we must necessarily determine what system we should adopt in its stead. Whether there is a practical mode of winter management of cows which is less objectionable.

Upon this point, allow me to present some considerations, drawn from my own observation and experience, which I find also accord with the experience, of some of our most successful feeders of beef cattle. And first let us bear in mind, that while we are not providing for an animal peculiar to the frigid zone, neither are we for one which requires the high temperature of the tropics, experience proves that the cow thrives best in the temperate zone. That it is not necessary, or even desirable that the temperature of the air around her, should be kept above the freezing point by artificial means. By so doing you promote only a sickly, hot-house development. Nature, when left to itself, prepares her for the heats of summer, and the colds of winter, and she will thrive better, in the pure air of *properly constructed* shed, than in a stable, though the temperature of the former may be several degrees colder. She requires in this climate, only thorough protection from winds and storms, dry, soft bedding, an abundance of wholesome food, pure water and salt. These with perfect liberty to eat or drink, exercise or rest, to enjoy the sunshine or return to her shelter, will secure that perfect health and development, both in herself and progeny, which in my opinion, can not be surpassed by any other mode of treatment.

I do not say, that shed of Capt. Slack's will answer the purpose, with gaping cracks and open pitching holes, of narrow proportions and tumble down underpinning, with boards off, and leaky roof, which serves only to concentrate the winter blasts, and pour them with accelerated fury, upon the shivering animals within. Nor will that other shed and yard of neighbor Sloven's, where animals wallow and mire in the mud, where the water from the eaves and higher grounds around, pour their floods unchecked within, and bring discomfort, disease, and death, to its occupants. Such pitiless hovels, such slovenly yards, are a disgrace to the man who permits them to remain upon his farm, are a standing proof, of his utter want, of manly energy and enterprise.

But the protection which I do recommend, are sheds not less than twenty-five or thirty feet wide, or over forty feet long. Made nearly air tight on three sides, and over head, facing the south, and their yards surrounded by other buildings, and high tight board fences. The grounds upon which they are built, should be elevated slightly above those around, and if not naturally very dry and hard, made so by artificial means.

Perhaps few are aware of the difference in the amount of protection afforded by such sheds, and those which have even small apertures or an open window in the rear, or over head. Into such sheds, the winds and storms of winter enter but slightly. If much more than forty feet in length, they should be partitioned, to prevent the circulation of currents of air, which may carry the snows of winter with them.

On the sides of these sheds, opposite the entrance, I would place suitable feed racks, to be used only in very cold or stormy weather, and for the purpose also, of feeding roots or grain. And to which cows should be fastened by suitable and convenient means, but only for the latter purpose. In pleasant weather, I would always feed them their hay, in open air, in racks not less than five feet square, and so high that they will never be tempted to step into them, and invariably provided with roofs. By this practice, it is much easier to keep the sheds in order, requires much less litter, and is quite as well for the stock.

With such conveniences, I find by experience that cows will thrive better, are less liable to contract disease, are stronger, and less liable to abortion, and the production of imperfect progeny. The labor required to feed and care for them, where water is convenient, is reduced by one half, while it is rendered much more agreeable. The processes of milking, is more cleanly and pleasant, and the quality of the milk and butter greatly improved.

As I have before intimated, the positions I have taken with regard to the superior thrift of cattle thus cared for, are corroborated by the testimony of some of our most noted producers of beef cattle. And in several instances, of which I have personal knowledge, shrewd, practical, observing, men have been led to abandon the use of stables for their beef cattle, by the fact that for want of room, they were repeatedly obliged to divide their stock, and the discovery in consequence, that those in the yards were decidedly better fitted, than those confined in the stables.

That Addison County grass fed beef, which as Mr. Fletcher, the market reporter for the N. E. Farmer, stated, was sometime during the past season, hung up by the side of the best Ill., corn feed article, and pronounced fully equal in quality, by the best judges, were fitted by one who has long since abandoned the use of stables for this purpose. I have known repeated instances, of superior beef cattle thus fitted, which have been the subjects of special commendation, by the reporters of Boston Markets, which facts, also have an important bearing upon the subject in question.

PROTECTION OF THE WEAK FROM THE STRONG.

We hear much said, and very properly too, of the importance of kindness to cows. But I firmly believe that the most fruitful source of abuse, and of which little is said, is found in that neglect so common, even among humane men, to protect the weaker members of the herd from injury, by the stronger, by the use of nubs of some sort upon their horns. No farmer can afford to neglect this simple precaution, whatever his system of management.

That herd of cows, now quarrelsome and tumultuous, can be almost completely revolutionized in this respect, by the use common brass nubs, at a cost, beside the labor of putting them on, not exceeding ten cents per animal, and the use of which will often save the farmer annually, ten-fold that sum. By the adoption of this simple precaution, much less shed room will be required, and the comfort and thrift of the animals greatly improved.

THE PRODUCTION OF CREAM.

Another condition of vital importance in the process of butter-making, is the maintenance of a proper and uniform temperature, throughout the entire process of raising the cream, and churning, and a low temperature until it comes to the table. When these conditions are disregarded, success is impossible. He who depends upon the sultry atmosphere of mid-summer to temper his milk and cream, must necessarily fail to produce, either a large quantity, or a respectable quality, during a large and very important portion of the season.

Nature has provided us with the means, by which at a comparatively trifling expense, we can regulate this matter of temperature. How many springs are gushing from our hill-sides, and running to waste, whose clear cold waters might easily be conducted to some neighboring dairyroom and pay annually, many times the cost in return, for the money and labor invested in the enterprise. Where these are wanting, nature provides an excellent substitute in the crystal treasures which she annually spreads over our waters, which we may easily store for this purpose.

It is by proper attention to this matter of temperature in connection with that of food, that we can make just as good butter, and as much of it, from the same quality and quantity of milk, in