The Vermont Farmer.

W H Matthews 1jan77

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After Twenty Years.

Although you've been a husband true,
'Tis many a year gone by, John,
And I'm a faithful wife to you
(And will be till I die, John,)
We led a lonely sort of life,
With no sweet child to bless us,
Till Bessy came last Christmas Day,
To comfort and caress us.

Our baby has a father gray,
A mother none too young, John,
And yet it seems the time of May,
E'er since our birdling sang, John,
She brought new life into the house,
The little, prattling stranger,
And, John, she binds you to your home,
Who might have been a ranger.

Once every chair was in its place,
And not a thing awry, John,
Yet we two, sitting face to face,
Would often breathe a sigh, John;
But now upon our ample board,
Is daily placed between us
A picture-plate and porringer,
From loneliness to wean us.

While she, our little baby queen,
With eyes so like your own, John,
(The brightest, bluest ever seen,)
Exits with us on her throne, John.
Heaven guard our precious little one—
May angels fair, that brought her,
Protect from every threat'ning ill
"The 'old folks'" little daughter.

Literary Notes.

ZELL'S ENCYCLOPEDIA, parts 29 to 32 inclusive, of the new and revised edition have been received. The original work was in two large quarto volumes of 1196 and 1152 pages, each three columns to the page, in fine but clear print. During a use of it for over four years, a part of which time we had some of Appleton's new Cyclopedias, our appreciation of its value has been steadily increasing, it is so convenient for use. We have found a few inaccuracies, as the date of Hugh Miller's death, 1855 instead of 1856, and some others. There is an unevenness in the articles; some are too long, others too short, but that is unavoidable and is as true of any other Cyclopedia as of this. We think in some of his illustrations, Mr. Zeil was not very happy, especially the personal likenesses; the one of Miller is in none of his authorized works, and Prescott s, the historian, is unlike that to be found in his biography. But these are minor defects, and impair but little the value of the volumes. We have compared a few articles with the corresponding ones in Appletons' great work, and, for most purposes, the information compressed in Zell's is almost as valuable. In the biographical sketches, the estimates of personal character, position and services are in harmony with the minutely detailed and elaborately drawn portraitures found in the works of Macaulay, Alison, Milman, Froude, Freeman, Hallam and others. For instance, we took special pains to compare the Cyclopedia's article on the Duke of Marlborough, with what is said of him in Hallam's Constitutional History of England, and were greatly pleased with the result, for Hallam has been uniformly regarded, we suppose, as a painstaking, accurate and judicious writer. The specialist, in any department, would need the extended and incomparably valuable Appleton's Cyclopedia, but specialists are few. Besides, many cannot afford Appleton's, it is so expensive, and we hope they will find in Zell's a "multum in parvo," which they can purchase and appreciate.

The revision consists, so far as we have discovered, chiefly in additional matter at the end of each letter. Thus, at the close of "G," we have half a dozen pages of new matter, some of the articles of great importance, that on Germany for instance, giving an account of that empire as it is to-day, with the name, size, population, etc., of each of the original states, an extended article on the Grape-vine disease; the civil, military, financial and economical condition of Great Britain as revealed by the last census; another on Guyot the eminent geographer, as well as on Gambetta, the promising young French statesman, and a brief notice of the late accomplished but dissipated pianist, Gottschalk. The date of a person's death has been added to the original article, as we noticed in the sketch of Guizot, of course greatly enhancing the value of the work. Some excellent maps are added—these four more contain maps of the United States and the Chinese Empire, and they are excellent ones, finely engraved, colored and very distinct. We notice that under the letter "H" are two articles of great value, one on the Hell Gate removal, a work recently crowned with such success, and the other on the Hoosac Tunnel, both illustrated with great accuracy and clearness. Our granger friends will like it none the less that it contains a notice of the Patrons of Husbandry. The additions to the first volume bring it up to 1273 pages.

HARPER'S MAGAZINE for the current month has been before us for some time, and is a fine number. It seems to us that this is the most even of the monthlies; it is always good, it has not spurts of extra goodness followed by three or four inferior issues. This number opens with a paper on Contemporary Art in England, with illustrations, among which Edward Armitage's "Esther's Banquet," J. C. Hark's "Luff boy, Luff," Thomas Faed's "The Mitherless Bairn," and Miss Elizabeth Thompson's "Missing," are the finest, and Miss Thompson and Holman Hunt's portraits please us most. We learn that Miss Thompson's fame was made early in life—she is only thirty-two—by the Prince of Wales taking a fancy to one of her pictures. It is gratifying to be told that the English people prefer domestic scenes to the warlike or fancy sketches, also that there are so many artists and so many who patronize them among all classes. The abominable premium chromos for religious and other papers have done no little harm to the culture of art among us. Then follows a paper on the Good old Times at Plymouth, richly illustrated; Brewster's House and Chair; Bradford Monument; the old President's Chair, of whose history Holmes has given so ludicrous an account, Peregrine White's cradle, Capt. Miles' Standish house and kitchen, hound, gun, table, etc. Another illustrated article is on the Magdalen Islands, with map and localities well represented, followed by a brief one, with portrait, on Felicien David, besides many other articles. A capital sketch of reminiscences of Thackeray, and Julian Hawthorne's "Garth," and the "Woman Hater," are continued. There is a humorous poem, with illustrations, entitled "The old Deacon's Lament." One of the poems, "In the Garden," is fair, but there are four lines which make it grand; they are these

"Does the wave recall that it foamed before,
In its flood-tide throb on the waiting shore,"
"But raised her clear eyes, that I might see
My heaven in their loving trust in me."

Let those who can give such lines to our contemporary literature, write poetry.

SCRIBNER'S MONTHLY has just come and is one of the most superb issues of the periodical press we have met. It is more rich and sumptuous in appearance than Harpers. Its illustrations are unsurpassed in this or any other land; as wood cuts we do not see how they could be made better. Hannah Hudson opens with a poem which reminds us of Dr. Holland's style and thought in Kathrina, which is followed by a beautifully illustrated one on "Norway and the Norsemen," full of interest, with an admirable medallion portrait of King Oscar, Second; Clarence Cook tells of "Beds and Tables," in his charming and successful manner; while Mrs. Herrick gives a charming chapter on Ferns and Liverworts, which we commend to all "Fern Hunters" in Vermont; Charles Barnard has a chapter on the English Workingman's Home, giving accounts chiefly of the homes in that part of London known as "Shaftesbury Park." It is a subject of first importance to every town or city in America, for one of the problems of our metropolitan life is to provide suitable, cheap but substantial tenements for workingmen. In no village have we seen that problem better solved, with neater, healthier, more homelike houses, than those of the Fairbankses' in this place. We have seen in some of the manufacturing towns of Massachusetts abominations almost without number called "factory tenements." The fashionable silhouette finds full scope in "Papa Hoorn's Tulip," and it is surprising how much those black outlines can be made to utter. Of course all readers will turn to Dr. Holland's story, "Nicholas Minturn," as one of the first things, the third chapter opens this month's installment. Of the poems we think Dr. Holland's "To Miss D. in her Album," and one by H. H., "A Dream," will be accepted as the most noteworthy. There is another prose article which we commend to religious people, "What our Churches cost us," for its facts, figures, and above all the things it suggests.

ST. NICHOLAS, for January, is magnificent, opening with Minuet, a poem, and full-page illustration, a capital thing for little girls. Then comes a letter to a young Naturalist, a Russian story with suitable illustrations, Badger's Centennial, by the inimitable author of Helen's Babies; a fine chapter on Stars for January by that unrivalled expert in celestial knowledge, Richard Proctor, with such full and accurate illustrations that a child of ordinary intelligence can learn the "geography of the heavens" unaided; Trowbridge's story for boys—and what "bad boy" or good one either but knows Trowbridge—His own Master, goes through three or four chapters, all of which, the fortunate boys who have St. Nicholas, will go through with a zest. Lucy Larcom has a weird poem, King Lonesome, then a nursery song on '77, whose musical "ding dong" will fix it in the memory of many an urchin. Horace Scudder's reproduction of some portions of that old New England Primer, with such poetry as this,

Young Timothy
Learnt sin to fly,"

with the original illustrations, is one of the most charming features of the number. And this is not more than half of the contents of this month, the remainder being equally rich and attractive. By all means let the children of ten years and upwards have it.

Notices of the North American Review and other matter must lie over till next week.

PROF. CRESSY, of the Massachusetts agricultural college, will deliver two lectures for Windsor county in the course provided by the Vermont state agricultural college, at Woodstock on Friday afternoon and evening, January 12. These lectures are on Veterinary Science, and are free to all. And the farmers of that county should not fail to hear so eminent a veterinary surgeon as Dr. Cressy.

AMONG THOSE who took awards on sheep at the Centennial were H. F. Dean, West Cornwall; Joseph T. Stickney, Shoreham; J. Q. Stickney, Whiting; A. E. Fuller, Pomfret; T. Stickney & Son, East Shoreham; Henry C. Burwell, Bridport; L. P. Clark, Addison; A. E. Perkins, Pomfret; and the Vermont wool grower's association. Most of these were for the Merinos for which our state is so justly noted. Pretty good for Vermont! But where were our cattle? Premiums by the score went to Canadian herds; but none to Vermont. Even English breeders exhibited and received awards, as did breeders from the west as far as Kansas, but Canada took the palm in quality and number of exhibits, unless we except a few near Philadelphia. We regret that Vermont had no exhibit worthy of an award, as we suffer by this neglect of ours, while the prominent position occupied by our sheep will greatly enhance the fame and value of that industry. Vermont's course towards the Centennial exhibition was narrow, and unwise all through, with few exceptions. True, enough of us went to see it, and that is the way we know how unworthy an exhibition our state made. Contrast Vermont with Kansas and Colorado, whose fame is now all over the world. We won't do so next time, that is sure.

Good Dairying.

Editor Cheever of the New England Farmer loves farming; indeed, we may say he has a passion for it. But he is a fancy farmer; he follows scientific rules; has "blooded stock" for which he paid a good round price, and he finds it profitable. He keeps, as we learn, eleven cows which give sixty pounds of butter a week, on an average during the year five and one-half pounds per cow, which he sells at seventy cents a pound and so realizes the snug little sum of $2,148 as the annual returns of a dairy of eleven cows; a sum greater than our Vermont dairies of thirty cows average. We know there are special dairies which may yield more, but we speak of the average standard of dairies and the average returns. Now does any one wonder that friend Cheever says "milking is as great a pleasure as eating strawberries?" The yield would not be large for the ordinary dairy months, but to raise the summer production so as to make the average for the year five pounds and a half to each cow, is something of an achievement. We believe our cows are "dried off" too early for one thing, do not have enough succulent, milk producing food after the first heavy frosts; are kept in too cold barns, and hence the substance of their food goes to producing heat instead of milk. We would have a stable so warm as never to freeze, light, sunny and well ventilated, with running water before the cows, so that they would be let into the yard on fair days only. Of course the cows must have early cut, clean, well cured hay—cut before the 10th of July— and shorts or bran and corn meal to keep up the flow of milk, after which the butter must be well made.

We kept during the season an accurate account of the butter made as well as receipts and expenses for the same, and as soon as the returns of the last shipment are received we shall make up our statement, not because it was specially good, for it was not, but to incite others to do the same and give a basis of comparison.

Horse Shoeing.

So far as our observation goes not one half of the blacksmiths in the country know how to shoe a horse in a proper manner. In the first place very many of them are poor bungling mechanics; they never had much native talent for the easy, rapid, skillful use of tools, and what they have has been but imperfectly trained; they have "picked up" a little knowledge of the tools and the working of iron, and set up in business, though of course there are many who are experts in the use of tools, who can iron a carriage or do the more mechanical part of the business with success. But few, very few, have any accurate, adequate or scientific knowledge of the anatomy of the structure of a horse's foot. They do not know how many bones there are, their shape, relations to one another, and their connection with bones and sinews of the legs, and consequently they can't tell what the necessary effect will be of paring the heel too much, or making the shoe too short; They do not see what the frog is for and so shave it off in a rough, crude way. No man is fit to put a shoe on a horse who does not understand these things, and it is one of the marvels to us that farmers—though to tell the truth they are about as ignorant and careless as the smiths,—and owners of horses generally, do not secure a law which shall compel a smith who shoes horses to know something about the structure of the horse's foot. Our practice has been to go around from shop to shop till we found a man who understood his business and then patronize him. We saw a pair of farm horses a few months since, aged seventeen and eighteen years respectively, on whose feet no shoes of any kind had ever been placed, and it was a delight and a study fruitful of practical hints, to examine their feet. Probably their size would have greatly shocked fancy horse men; the size of the frog would have disgusted most horse-shoers, and the shell of the foot was a marvel of solidity, thickness and strength, while the indentation which their fore feet made on the soft earth was nearly if not quite eight inches in diameter. Those horses knew nothing of ring bone or founder in the feet; theirs were full grown according to nature's laws and purpose. We commend to our readers who own horses the following from that authority on all such matters—the Forest and Stream:

On an average horses require shoeing once a month. The length of time a shoe will wear depends much on the kind of service a horse is doing, and on the kind of road he is daily travelling. A team horse in heavy draught does not wear out as many shoes as one used on a hack; quick motion grinds shoes down more rapidly than slow use. The hind shoes wear out first, and there is more strain and friction on them than on the forward shoes. It is impossible and improper for a horse to wear shoes more than six weeks, for the growth of the foot shortens the shoe, as well as changes the shape otherwise. The neglect will cause the shoe to encroach upon the soft textures of the foot and produce lameness.

There are few practical mechanics who have sufficiently studied the foot of the horse. It is not enough to know the anatomy of the foot, and where to insert a nail not to cause pain, but the foot should be studied in the state of nature, before the mechanism of man has by artificial appliances distorted it. The shape of the hoof of the wild horse, or of one which has never been shod, should be taken as a model. The foot is then properly balanced, neither too long nor too broad, but it has adjusted itself to nature, and the muscles and tendons are not strained by travel. Confinement and unskillful shoeing change the anatomical relations of the foot, and the best judgment of the mechanic is often taxed to correct the growing deformity—from unskillful shoeing. When a reasoning, skillful mechanic is found, the horse is safe in his hands, for he only preserves the normal shape of the hoof, and adjusts the shoe to protect it. The frog in the hoof of the horse is placed there for a particular purpose, and should not be cut by the shoer. If this is allowed, contraction and lameness will follow. The shape and weight of the shoe should be accommodated to the purposes for which they are designed. The track horse requires a shoe lighter and without calks, while the draught horse must have a heavy broad shoe, with calks to enable him to obtain foothold and travel with the least possible strain.

Dairymen's Association.

We want every farmer, especially those who keep cows, to read the appended lines from the New England Farmer on our association, before he decides to stay at home. If such is the estimate of a man outside our state, and naturally interested for his own state board, it becomes the dairymen of Vermont to give more attention to it, and as Mr. Cheever says, the returns from the two or five dollars, for annual or permanent membership, are so great, that none it would seem can wisely refrain from becoming members.

At the Van Ness House the terms will be but $2.00 per day, which, considering the fine accommodation, excellent table and attention which the guests of that house enjoy, is a low figure even for these times. What the American and other hotels will charge we know not, though our friends can get cheaper accommodations at lower rates, but we cannot speak of the other hotels from personal experience, as we always register at the Van Ness, which will be the "headquarters" of the FARMER.

The Vermont Dairymen's association pays its members the largest rate of interest, for the investment required, of any organization within our knowledge. Two dollars constitute an annual and five dollars a life member, entitling one to several back volumes of the societies' transactions, which alone are worth many times the cost of membership. The Central Vermont railroad, also, generously favors members of this association with tickets to and from these winter meetings, at greatly reduced rates, acting upon the principle, no doubt, that the more intelligent and enterprising a community of farmers may be, the more freight they will send over their road to the markets.

With these advantages of free return tickets over the railroads, back volumes of the Society's Transactions, and a three days' public meeting, open to all, free of admission, it is safe to say that the Vermont Dairymen's Association offers the best return for the funds invested of any organization in the country, and as the fees from new members are the only source of income to the Society, the dairymen of New England, for it is not confined to Vermont, should feel it not only a duty but a privilege to join in its ranks and, while helping the Society, help themselves even more.

Corn Crop.

BY JONATHAN LAWRENCE.

Agreeably to our promise last week we give the practice of other farmers with the corn crop. E. A. Parks of Passumpsic formerly raised as a grain crop from five to eight acres of corn which he fed largely to beef cattle. He began a few years ago to raise corn for fodder, feeding it to cows when the pastures began to fail. Pleased with the result he has now given up raising corn as a grain crop and grows from four to six acres for fodder, planting about double the number of rows and hills in the row as for a grain crop; uses an early variety of sweet corn for seed, and cuts up and cures in the ordinary way, when the corn is fully in the milk before the fodder begins to turn yellow. He feels to cows once a day and hay twice. He formerly raised roots but thinks he gets more value of fodder with the same expense from the corn. A. F. Lawrence, who furnishes a portion of the village of St. Johnsbury with milk, raised, the past year, a few acres of extra stout fodder corn, a sweet variety, that he fed to his cows during last fall's drouth, keeping up the regular amount of milk, which he could not have done without the corn. There are many other farmers in Caledonia county who are giving up almost entirely corn raising as a grain crop and growing it for fodder to their advantage as they fully believe.

Maine Agricultural Report.

BY T. H. HOSKINS, M. D.

We are indebted to Hon. S. L. Boardman, secretary of the Maine agricultural board, for a copy of his report for 1875-6, being the twentieth in annual succession, and the third of the present secretary, the previous seventeen having been issued by Mr. Boardman's predecessor, Hon. S. L. Goodale. This set of reports we regard as among the best treasures of our library.

The present report is one of great interest; its principal contents are, first, a special report by the secretary on the great menhaden fishery of the Maine coast, which furnishes such an abundant source of fertility to the farms of New England in its refuse, left after the extraction of the oil. This refuse, called fish guano, or "chum," amounts annually in quantity to something like 20,000 tons, worth by analysis from $25 to $35 a ton, but selling from the oil factories at $10 to $15.

Succeeding this is the report of meetings and discussions, with the addresses and essays made and read. The topics were, "Planting an Orchard," "Associated Dairying in Maine," "The Dairy Cow," "Needs of the Dairy," etc., illustrating the rapid growth of the dairy interest in a state heretofore backward in that branch of husbandry, but now promising soon to become a rival of Vermont and New York therein. Maine's devotion to lumbering and navigation, and its accessibility to the great sea-board markets, has heretofore led to the shipping of its agricutural products in the cruder forms of hay, potatoes, etc.; but the injury resulting to the land thereby, has led to a change, and now it will not be long before the growth of crops to be consumed on the farm, with results in the form of butter, cheese, wool and fine meats, will have the effect to raise the profits of farming and restore the farms to something like their original fertility. Other topics, such as "Sheep Husbandry," "Mutton rather than Wool," "Raising Neat Stock," "Management of Grass Land and Pastures," etc., etc., point in a similar direction.

But the most interesting of all the contents of this report, and the most hopeful to the state, are the addresses of President Allen and Professor Fernald of the state agricultural college, and the evidences of hearty co-operation and good feeling existing between the board and the college. The fact and the reason of it are exhibited together. The Maine agricultural college—though receiving but four thousand dollars from the national endowment—is a living and lively reality. Says the secretary:

"The state college of agriculture and the mechanic arts has graduated its fourth class, numbering 18; and has had a year of marked prosperity. The freshman class of 1875 was the largest ever admitted into the institution. With an efficient faculty and the liberal aid of the state it will go on in a course of sure prosperity, giving to our young men who desire it, at a moderate cost, the advantage of a thorough, liberal, scientific and practical education. This it does by means of the most approved modes of instruction, by giving to every young man who pursues the course of study *an opportunity practically to apply the lesson he learns in the class room, and by furnishing him facilities for repaying a part of his expenses by his own labor.*"

The address of President Allen shows him apparently the right man in the right place, as witness the following sound talk:

"We do not send the young theologian to a military academy, nor our soldiers to be trained for generals to a divinity school. Nor need we expect that the wants of a superior agricultural education will be supplied in a classical college. * * * * What we insist upon is that he who has thoroughly prepared his mind best to enter upon some useful employment, disciplined by severe study, *ready for action by well directed exercise*, stand the peer of the proudest scholar in the land; that the study of science can discipline the mind, enlarge the understanding, arouse the imagination, elevate the taste and refine the manners as effectively as the study of literature; that applying science to practical ends *does not degrade learning, but ennobles it.* The true glory of education is its abundant fruit. They who form the deep farmers of a well cultivated intellect are able to bring forth the greatest harvest of usefulness, who can sow by all waters, are best deserving the appellation of *liberally educated.*"

"These then," continues the worthy head of a true farmers' college,—"these then are the ends to be pursued in the highest form of agricultural education. First—To raise up those who can successfully stand interpreters between pure science and useful labor, and apply recondite principles to the various details of practical life, so as to secure abundant harvests without injury to the soil, the best products of herds and flocks with the least expenditure, a competence of worldly goods and the joy of intelligent success. Second—To elevate the farmers' calling and make it worthy the choice of our best young men. To withdraw the aspiring from the fevered dreams of speculation to the surer returns of healthy, honest toil, from over-crowded professions to productive employments, from a life of harrassing care to the calm content of honorable independence."

And now let every farmer read this from the same noble address:—

"In connection with this higher agricultural education, a better scientific and technical education should be furnished in our *public schools. How little that is now taught in those schools has any relation to a farmer's life!* When intelligent, liberally educated agriculturists have a place on the board of education, *there will be some change in the course of study.*"

Yea, verily, will there, most worthy president!

From the address of Prof. Fernald, of the same college we must make a few extracts:

"When every man can feel that his own interests are identified with those of capital, the antagonism that now palsies the energies of labor and cripples the enterprises of capital can no longer be maintained. Labor holds in its own hand the rod which may break the shackles of its wrongs. No amount of legislation can securely protect its rights, so long as the great majority of a people are unscholared. It is education alone that can lift from subordination to independence."

Referring to the necessity of conjoining the practical with the scientific in industrial education, Prof. Fernald cites the case of Watt, the inventor of the steam engine, of whom he says:—

"Inventions have generally been the joint product of the mind familiarized by study with the laws of machinery, and the hand trained to practical skill. Not unfrequently the germinal idea, or principle of an invention, has been conceived in the brain trained by study and reflection, and long years have intervened before the skillful hand has been found to give it palpable expression and existence. When Watt conceived the idea of a separate condenser for the steam engine he was not himself capable of the delicate workmanship necessary to give practical realization to his conception. Fourteen years passed away with repeated failures, and the despair which poverty begets, when he was so fortunate as to enter into partnership with Boulton, a trained manufacturer in iron and steel, who furnished the requisite mechanical skill to give completeness to the invention. * * * * The history of civilized nations testifies that in the proportion in which the skillful hand has been associated with the working brain, has the condition of individuals been improved, the wealth of communities increased, the arts and comforts of life multiplied, and general prosperity attained."

"The deranged balance of society can be restored only," says the professor, after adverting to the overcrowding of trade and the professions, "by rendering back its former honor to labor. It must be recognized that productive industrial pursuits possess the same degree of respectability and dignity accorded to the mercantile and other professions. In a word, agriculture and all forms of handicraft requiring skill and intelligence, *must be made liberal professions.* This can be done only by stocking them with men of liberal culture, *for it is not the profession that gives character to the man, but the man who gives character and standing to the profession.*

"Many there are," continues Prof. F., "who seriously question whether a course of study, literary or scientific, will not educate young men *out* of industrial pursuits, so that never again will they return to the farm or workshop. It is true that an agricultural education cannot make a man a farmer. The selection of a vocation will ultimately rest where it should rest, upon individual choice. But circumstances influence choice, and preparation for the farm will probably lead to a life on the farm;"—

And few will doubt this in the case where scientific training is united and interwoven with its practical application, as in such institutions as the Maine agricultural college.

Following the reports of the meetings and addresses, are the special reports of the various agricultural societies of the state, which are with great advantage to all, made co-operative under the Maine laws, and united into an organic whole, instead of being independent and even antagonistic bodies as in Vermont. The most perfect and elaborate document in this volume is the report of the state pomological society, giving in 172 pages a complete résumé and compendium of the fruit growing of the state. This is followed by the report of the Maine Dairymen's association, and of the county societies. We heartily wish we could see in our state all the similar agricultural organizations working so harmoniously together, each for the benefit of all, and all their reports thus embodied together in a single volume. "In union is strength" is a motto that our board of agriculture, state agricultural society, dairymen's association, granges, clubs and local societies ought to feel the force of more than they do. It is not creditable, and it is certainly prejudicial to the agricultural interests and prosperity of our small state that, with some twenty distinct agricultural organizations, no two of them, outside of the granges, recognize, or have any concern with each other. Petty jealousies, rivalries and personal unfriendliness spring out of this condition of things; progress is hindered, and even the vitality of some of our best institutions endangered by it. Cannot we "reform it altogether?"

Newport, January 4, 1877.

A COW'S STOMACH.—"The cow has four stomachs. If she is eating grass, for instance, this feed takes the form of a ball as it descends to the pouch or first stomach. During the time that the animal is browsing, ball after ball passes down to this pouch, where they remain like so many eggs in a basket until she is ready to lie down and masticate them. Then, one at a time, these balls rise in the gullet, and are chewed up at the cow's leisure, passing, after sufficient mastication, down again through the first stomach on into the second. Here they lie long enough to imbibe a fluid that softens them and allows their passing into the third stomach; here the softened balls begin to mix. By the time they have reached the fourth stomach—which is the rennet—the mass has assumed a yellowish, creamy appearance, which soon becomes coagulated and ready to be ejected, and diffused through the blood from which a part is finally separated by the action of certain glands which have the power of appropriating parts of the food in order to produce certain fluids, the mammary gland taking up that proportion required for milk."—*Dr. J. V. C. Smith.*

ABOUT BUTTER.—Half the milk of the country is nearly wasted, because the dairymen either do not know, or are not ambitious to make a gilt-edged article. Good butter is a luxury and always commands a good price, but greasy, frowsy butter is loathsome, fit only for the cart-wheel, and poor even for this purpose. There is no branch of farming that calls louder for reform than the dairy business. It is a great national loss that so much milk is spoiled in its manipulation. The average butter taken in at a country store is miserable, and what makes the matter the worse, the price paid is often regulated by the inferior article. The merchant should make more discrimination between good and poor. It is difficult for him to do it so long as he purchases in the way of barter, for A says you paid B so much for his butter and is offended if you offer him less, though B's butter may be worth twice as much. The remedy for this state of things is partly with the merchant, but more with the farmer. Let each one study the art of butter making and strive to excel, and both he and the public will be benefited. We like the spirit of one ambitious woman of our acquaintance, who took her butter to the county fair for a number of years, without securing anything more than the second and third premiums. "I don't care," said she, good-naturedly, "I am going to keep on trying till I get the first." She finally reached the goal of her ambition, and now her butter is current at gilt-edged prices. How much better is this than to blame the committee and act like a stalkey horse.—*Alexander Hyde.*

Correspondence.

A Word to Highway Surveyors.

The snow storms which are following each other make it probable that Vermonters are to be favored or troubled (which?) with an old time amount of snow; which will, of necessity, make travel on the ordinary, and especially hill roads rather uncomfortable, and the labor great of keeping them in even a tolerably passable condition. But the greatest amount of inconvenience is found in the turning out of loaded teams, or their passage by each other on meeting.

It is in this connection that I would have a "word" with those having the care of our roads in the winter. What I can say will be only to enforce upon their minds the paramount importance of that which must be apparent to all men of experience and common sense. It should be the duty—and the statute should make it such, if it does not—of surveyors to see that there are "turning-out" places within reasonable distances of each other, on all roads where the amount of travel does not make a wide, or what is equivalent to a double track. These places should be kept hard, so that loaded teams can pass in safety when two of them meet; and their nearness to each other should depend upon whether the drivers of the teams can see each other a longer or shorter distance. Where the view is unobstructed, of course a longer distance can intervene between these places; and custom, if not law, should require that teamsters, when they discover an approaching team, should stop and wait at one of these turning-out places unless he is sure it would be for their mutual advantage for him to drive on and pass at one further on. When the view is broken by woods or hills, these places should be more frequent. Attention to this matter would, often times, save damage and much trouble.

D. T. AVERILL.

Northfield, January 1, 1877.

Reports of the Board of Agriculture.

I have been looking over the last report of the board of agriculture, and have found very much to interest and profit. I miss the discussions usually included after each paper read, but the space is well filled in the treatment of a great variety of subjects connected with all departments of our industry. I wish that these reports could be placed upon every farmer's table, and that they had a sufficient interest in the matter to read them thoroughly and to carry out more fully the ideas therein advanced, and in so doing make a perceptible advancement in their occupation from year to year.

I would urge upon farmers' sons the advantage of getting these reports if possible, three of which have already been published, as the foundation of a very useful library, containing such a variety of information upon every department of agriculture, and which will prove valuable as works of reference and serve to indicate the progress that is continually being made in rural pursuits. We know that farmers are very much interested whenever they attend the meetings of the board, and second only to these is the reading of the reports in a permanent form, and that can be referred to whenever necessary. It is very plain that farmers read too little of that which pertains exclusively to their occupation. It is not enough to be conversant with the news and current literature of the day, but a farmer should be thoroughly informed concerning the progress and improvement that is being made in his own occupation, and this cannot be accomplished without reading. It will stimulate thought and observation, and this will lead to comparison, a pretty faithful test by which to determine our whereabouts agriculturally, and thus advancement will be made, gratifying to ourselves and of interest to others.

It is the commencement of another year and I would suggest to the farmers that in the selection of reading matter for the future, prominence be given to that pertaining to rural affairs, the best and most practical that can be had, and all should remember that in the selection the interests of wives and boys and girls should be properly considered, that the first may be cheered in their manifold labors, and the last be assisted to form good reading habits and be encouraged to follow and excel in the occupation to which they are being reared, and in which so many honorable men and women are engaged.

E. R. TOWLE.

West Berkshire.

CELERY.—The habitual daily use of this vegetable is much more beneficial to man than most people are aware of. A writer who is familiar with its virtues says: "I have known many men and women who, from various causes, had become so much affected by nervousness that when they stretched out their hands they shook like aspen leaves on a windy day, and by a moderate daily use of the blanched footstalks of celery as a salad they became as strong and steady in limb as other people. I have known others so nervous that the least annoyance put them in a state of agitation and they were in constant perplexity and fear, who were also effectually cured by a moderate daily use of bleached celery as a salad at meal time. I have known others to be cured of palpitation of the heart. Everybody engaged in labor weakening to the nerves should use celery daily in the season and onions in its stead when not in season." To this we may add that a prominent New York druggist draws in winter from his soda fountain a hot extract of celery, mixed with Liebig's meat extract, under the name of excelery. It is a nourishing drink at lunch time, far better than coffee or tea, and is doing a great deal in this neighborhood to promote temperance. We give celery almost daily to our canary birds and it cures them of fits; they are little animals, with very delicate nerves, easily frightened, and therefore they need such a remedy very much, and the relish with which they take it is a proof that their instinct guides them to eat what is good for them. A manufacturer of perfumery of our acquaintance some years ago commenced to prepare an extract of celery seed, put up in bottles, and intended to give strength to old or exhausted persons, who, by over-indulgences, have reached such a state as to require restoratives.—*Journal of Chemistry.*

FARM CHIPS.

That great wheat country, Russia, can, by the labor of her serfs, grow wheat cheaper than can any American farmer. When the western farmer puts his seed into the ground, he gives little thought as to the character of competition which stands in his road.—*Western Farm Journal.*

Don't be too hasty in your judgment. Brains can be applied to farming as to all other subjects, and their use will in the long run tell on the general productive result of our farms.—*Live Stock Record.*

The idea that meat is more difficult of digestion than vegetables is erroneous; roast lamb, beef and m