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THE DIETETIC REFORMER

AND

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THE ANNUAL MEETING, 1869.

THE Executive Committee have arranged for the annual gathering to be held at the TREVELYAN HOTEL, MANCHESTER, on *Wednesday evening, October 20th*. The Business Meeting, to receive accounts and elect officers, will be held at four o'clock. The Evening Meeting will be held at six o'clock, when tea will be provided. Early application for tickets is much desired, in order that proper arrangements may be made. Members and friends whose annual contributions are in arrear will facilitate the duties of the secretary by an early remittance, to meet the liabilities of the society.

It is very desirable that our friends should assemble in as great force as possible, to aid an effort which it is intended to put forth for the more effectual working of the movement. Professor Newman has been desired to prepare a suggestive paper; and it is intended to devote a large part of the evening meeting to the consideration of his and other suggestions. The meeting will be open to receive practical advice from any friendly quarter; and any members who may be prepared to lend active help are cordially invited to come forward and offer their services.

DIETETIC FALLACIES.

THE question of food—kind, quality, and variety, as best suited to man in the various climates of the earth—is one that perhaps deserves a more extended, careful, and thorough treatment than it has yet received. That various and greatly diverse climates require corresponding varieties and adaptations of diet, will not be seriously doubted by anyone who has observed widely and thought closely upon the question. Still, we are of opinion that these changes are not so essential and not so profound as are generally and popularly supposed, provided we are satisfied to live upon the simple products of the earth, taking them in moderation and in their most wholesome condition, properly prepared, and in suitable quantities, unaccompanied with intoxicating beverages and other pernicious substances, such as tobacco, opium, &c. The typical foods—*bread, grapes* (fresh or dried), *figs, olives, rice,*

cheese, &c., can be eaten, enjoyed, and digested almost anywhere by an average healthy human system. And water, pure, sparkling precious water, cold, warm, or hot according to circumstances, is always a boon and a blessing to man. But there are some things that seem to be more specially adapted to particular climates, seasons, or ages than others, and, for the most part, our beneficent creator and preserver has so arranged and adapted the products of the various regions and seasons as to facilitate man and beast in their instinctive and rational efforts to obtain what is best and most needed. Still this provision is not so uniformly complete and manifest as to preclude the necessity for wise and discriminating observation, and for the discipline and stimulus of effort, enterprise, and commerce. At some ages, in some conditions and climates, men can and do indulge in a greater variety of food than in others; and it would appear to the unthinking savage, or to the more civilised but equally unreflecting gourmand, that almost anything in any quantity can be eaten by some men with impunity. Neither quantity nor quality, provided there is plenty, seems to be matter of much moment to some carnivorous animals, especially those of the man-kind. But this impunity is only seeming, and is only for a time. Nature, the law of God in the life of man, as in all other lives, and in all spheres and modes of being, will not and cannot be mocked or cheated for long. It is a profound truth, an unrepealable law, that whatsoever a man soweth that shall he also reap. We may for a time deviate from the line of rectitude as to diet, and still continue to live on; but the life we live, not being so true to our nature, will not be so full of the pure instincts, healthy activities, and joyous inspirations of nature.

If we look through animated nature, we find every creature so wisely constructed, and endowed with such marvellous instincts as induce it to make choice of that diet and of those means which are best calculated to maintain and preserve its existence. Were not this the case, animal life would soon terminate. Man is surely not intended to be an exception to this grand and beautiful law of adaptation and healthy conservation. He is the last and the most finished result of Divine contrivance and creative power and wisdom. But, alas! how has the fine gold become dim! how has the wine of life become soured! There is no other creature on the face of the globe that has so manifestly deviated from rectitude and from the manifest moral intent of his being as man; and we cannot but believe and perceive that much of the degradation and depravity of human character, conduct, and constitution arise from his enormous dietetic transgressions, alike as to the kind of food, the quantity, and the strange mixings-up of our fantastic cookery, our epicurean cravings, and our depraved lusts.

We have been led into making these remarks rather to induce other, with abler and more discriminating pens, to take up the subject they suggest, than from any intention to pursue the inquiry in any elaborate essay. Our object is only to write a brief article or two, hoping to stimulate those who have more leisure and more ability to go deeper into the question and to treat it more exhaustively.

A recent number of *Cassell's Magazine*, which we have not seen, is credited with the following suggestive paragraph, to which our attention has been turned:—

“EATING IN INDIA.—Nor is moderation in eating to be disregarded. Could we eat as do the natives—that is, confine ourselves to a vegetable diet, and make a feast of a handful of rice—probably the climate would be as innocuous to us as to them, but then there would perhaps be an end of the energy which flesh-eaters show. There seems to be little doubt of this, for, as is well known, when the French railways were beginning to be made, it was the English ‘navvy’ who made them, and his French coadjutors were looked upon as a feeble and effeminate

race; and so, for the business of railway making, they practically were. But as hands were very scarce, a leading contractor tried what he could do with what he naturally called 'the foreigners,' and insisted on his French excavators eating and drinking somewhat after the fashion of their English mates. The result appeared decisive—the French navvies grew to be, and are, nearly as effective as the genuine midland counties man. Thirty years ago no one would have predicted a riot in England because of an immigration of foreign excavators, yet we have lived to see even that come to pass. In India the food is seldom to the liking of a European, it must be eaten when so freshly killed that it cannot be tender. The driver starting on his journey often takes a live fowl with him, to be killed and cooked when required; it would be thoroughly tainted did he kill it beforehand."

Now, we are ready to admit that this paragraph—which we observe is doing duty in the periodical press—as a select sub-editorial clipping, is quite as sensible, though quite as fallacious, as most of the newspaper writing that we see upon dietetic questions. "Moderation in eating" ought not to be "disregarded" either in India or elsewhere; but it is not always good policy to eat as the natives do, as the following spicy paragraph cut from the *Daily News* will indicate:—

"HOW TO COOK A MAN.—If any one of us looks forward to being eaten by cannibals, he may wish to be informed how he is likely to be cooked. It is a comfort to know that the savages who devour him are by no means devoid of refinement in their culinary disposition. Some French soldiers were lately taken prisoners by the Canaks, and one of them was killed and eaten. His comrades describe the process. The Canaks first decapitate their victim, a matter of no small difficulty considering the bluntness of their hatchets. Ten to fifteen blows are necessary. The body is then hung up to a tree by the feet, and the blood allowed to run out for an hour. Meanwhile a hole, a yard and a half deep and a yard wide, is dug in the ground. The hole is lined with stones, and then in the midst of them a great fire is lit. When the wood is burnt down a little and glows with heat, it is covered over with more stones. The man is then cleaned out, and divided into pieces about a foot long, the hands and feet being thrown away as worthless. The pieces of the man are placed on the leaves of a large rose tree peculiar to the tropics. The meat is surrounded with cocoa-nuts, bananas, and some other plants noted for their delicate flavour. The whole is then tied together firmly, the fire is removed from the pit, the meat is placed among the hot stones, and thus, carefully covered, is left to cook for an hour. Women do not partake of this warriors' feast. Men alone are allowed to enjoy so great an honour and so rare a delicacy."

It is clear from this *Daily News* paragraph that the Canaks have a system and morality of diet and social habits very much divergent from those natives of India who "make a feast upon a handful of rice." And, if we had our choice of living and dying, cooking and eating, we would prefer not to be amongst the Canaks! but to be as far removed from their philosophy and practical dietetics as possible. They may have the more savory dishes; but commend us to the rice feast. "Better is a dinner of herbs where love is, than a stalled ox and hatred therewith." "Better is a dry morsel, and quietness therewith, than an house full of sacrifices with strife." Solomon perhaps had never heard of the Canaks or other cannibals, in his time; but he had observed that flesh eating tended to strife and hatred; whilst a simple, natural, and bloodless diet favoured and promoted a more amiable and affectionate social condition.

The very fact that the flesh-eater has to *kill* before he eats, and to kill what he eats, cannot but tend to make him a man of strife and bloodshed: and there is but a step—a fearful yet still a possible step—from killing and eating an ox, and killing and eating a human being. Our flesh-eating friends are next-door neighbours to the Canaks, whilst we prefer to live nearer to the rice-eaters of India, who will never be tempted to cook and eat us, however hungry or angry they may be.

But it is objected that if we "eat as do the natives of India," that is, confine ourselves to a vegetable diet, and make a feast of a handful of rice, though "probably the climate would be as innocuous to us as to them;"—what a grand admission!—"but then there would perhaps (?) *be an end of the energy which flesh-eaters show.*" Here we have the curious and astounding hypothesis, that what favours HEALTH and LONGEVITY will perhaps destroy ENERGY! In our next article we will look at this curious dietetic problem; and in the meantime we shall avoid the Canaks, whose energy, though no doubt great, is greatly to be feared and not at all to be admired, and certainly ought not to be imitated in civilised and Christian countries. Indeed it is not good enough for even benighted India or degraded Africa. B.

MAN'S BEST FOOD:

AN ARGUMENT FOR VEGETARIANISM.

(Continued from page 36.)

Our illustrations are, however, open to the objection that they are too few to afford scientific proofs of the suitability of such a diet to men in general. We therefore proceed to adduce facts on a larger scale, and including persons of various ages, who have been systematically experimented upon for the purpose of discovering the effects of various kinds of foods. This method seems best adapted to the people of this century who mostly dislike abstractions and remote inferences. In this direction we offer substantial facts which tell their own story.* An eminent German physiologist (Vierordt), weighing carefully the results of numerous experiments on that which enters the body as food and that which leaves it through the several channels of purification and discharge, tells us that an adult male, to keep in good condition, should take about 4oz. of albuminous matter, nearly 3oz. of fat, and about 10½oz. of amylaceous food daily. About 84oz. of water would be taken as drink, and about an ounce would have to be allowed for saline matters contained in or added to the three leading articles of food. The four articles of diet in the quantities specified below are therefore a model dietary as to chemical composition.

	Albuminous Matter: Gluten and Albumen.	Fat.	Amylaceous Matter: Starch, Sugar, and Gum.
Bread..... 1lb	= 861	65	3,847 grains.
Potatoes ... ½lb	= 50	7	701 "
Oatmeal .. ½lb	= 638	198	1,810 "
Milk 1 pint.	= 350	245	315 "
	1,899	515	6,673
Vierordt.....	1,920	1,440	5,040
Defect.. 21	Defect.. 925	Excess.. 1,633 = 653 grains of fat.	
		+ 653	
		Defect.. 272	

By careful observation then we have it ascertained what a man requires as food, and by exact analysis we learn what any kind and quantity of food can supply. If the kind and quantity can be supplied from a Vegetarian diet our case as to its efficiency will be established, but we can prove much more than this. The experiments made at the Glasgow Bridewell in 1840† shows an advantage in a simple

* Day's Physiological Chemistry, p. 496.

† Fifth Report of Inspectors of Prisons, Scotland.

Vegetarian diet over one containing a small quantity of flesh-meat, as seen in the table below. The experiments were made upon eight groups of prisoners, the greater part being adult males.

	1	2	3	4	5	6	7	8	
Oatmeal	91 oz.	91	91	91	91	56	91	..	per week.
Potatoes, boiled.....	336	336	336 (baked)	224	112	112	..	672	
Meat.....	..	..	..	28	56	..	..	..
Bread .....	..	..	..	..	..	112	56	..	
Total solid food..	427	427	427	343	259	280	147	672	
Buttermilk	10½ pts.	2½ (skim milk)	10½	10½	10½	7	10½	..	
Broth*.....	..	..	..	..	..	..	14	..	
Total liquid food.	10½	2½	10½	10½	10½	7	24½	..	
Average weight gained	4	4	..	..	..	2¼	..	3½	
„ „ lost	..	..	1½	1½	very slight	..	less than ¼ lb	..	
Prisoners submitted to experiments...	5 m. 5 boys.	5 m. 58 fem.	378 m. 5 fem. 2 boys.	16 m. 5 fem.	15 m. 5 fem.	570 m. 578 fem.	578 m. 5 fem.	1078 men and boys.	

* The broth contained 4oz. barley and 1oz. bone, with vegetables to one quart.

The facts here show in No. 1 an improvement in condition upon a diet consisting of three articles only, viz., oatmeal, potatoes, and buttermilk; and in No. 2, even with a serious reduction in the last named article, the results are still very good. No. 3 is a similar dietary, but the potatoes are baked, and half the prisoners experimented on are young women, but they fell off in weight. 4 and 5 have flesh-meat, 1¼lbs. being substituted for 7lbs. of potatoes, and 3½lbs. for 14lbs.; the proportion of females was smaller, but the effect was to produce nearly as great a loss in weight in one case and a slight loss in the other. No. 6 changes the flesh for twice its weight in bread, taking away 3½ pints buttermilk and 35oz. oatmeal, with the effect of producing a gain in weight instead of a loss, and we notice this is the only case in which a group consisting partly of females shows a gain in weight. Considering the quantity consumed, No. 6 must be pronounced the most satisfactory diet; No. 3 the least so. No. 2 and No. 7 stand higher than 4 and 5, and on the whole the Vegetarian lists, though restricted to a few articles, come out triumphant.

Dr. Guy, to whom we are already indebted, quotes† the dietary of the Irish Military Prisons as excellent for their purpose, although no flesh-meat is used in them; they consist of bread 56oz., oatmeal 56oz., Indian meal 42oz., total 154oz., with 10½ pints of milk per week. Dr. Tuffnell reports on the Dublin Prison: "To the increase of the dietary, and especially to its alteration I have ever been upon principle opposed, because I found that I could upon the old scale of dietary maintain the man in the most perfect condition." A good reason indeed, and the highest encomium that could be passed upon a dietary. The same gentleman says of the dietary used for the "penal class" at Millbank Prison, and which consists of bread 84oz., oatmeal 70oz., Indian meal 70oz., potatoes 56oz., and 10½ pints of milk per week:—"The dietary was favourably reported on by my predecessor, Dr. Baly, in 1858, and in my own report for 1859. It has stood the test, both of experimental weighings and of more general observation of the state of health of the prisoners." In summing up a very able paper containing a widely-extended view of facts and experience he has these among other conclusions:—"That we possess conclusive

†Journal of the Statistical Society, September, 1863.

evidence of the sufficiency of a diet from which meat is wholly excluded, and even of a diet consisting entirely of vegetable matter; that such a diet would probably suffice for able-bodied paupers, and even for prisoners sentenced to hard labour, and for convicts employed at public works; and that this is true of men previously accustomed to animal food. That the potato is an important element in our dietaries, and that its omission has probably been the true cause of outbreaks of scurvy which have been attributed to a mere reduction in the quantity of food."

We are indebted to Mr. Edwin Chadwick for a view of this similar experience, combining the effects upon health and life, which is extremely interesting, and brings our proof out into strong relief. In a speech to the Society of Arts he said:—"The death-rates in the army had been reduced in many instances by sanitary measures by one-half, without any important alteration of the dietaries. The effects of the prison dietaries, combined with improved sanitary conditions, were the most instructive. Soldiers were taken from the ranks, generally the worst conditioned men, where the death-rate was seventeen in a thousand, and put into military prisons in Ireland, where the death-rate was reduced to two and a half per thousand, and the sickness in proportion. The dietary consisted of eight ounces of oatmeal, eight ounces of Indian meal, and eight ounces of wheaten bread, with half a pint of milk at the three meals, daily. There was no meat, no tea, no coffee, no beer, no tobacco, none of the stimuli which they got in the ranks, and their general health and strength was vastly improved. The medical authority who had observed the effect of this dietary for years declared he would make no alteration." In another part of his address he mentioned the following facts:—"It had fallen to him to collect and compare, rudely as it might be, the effects of different public dietaries, before chemical analysis had been brought to bear on foods. It was at that time urged by medical authorities, and indeed is still so by many, that dietaries containing high stimuli beyond those got by the hard-working honest population, were necessary to sustain the health of the prisoners. He found that the quality of the diets, as containing more or less of animal food, was very much represented by the cost, and this varied from 1s. 2d. to 5s. and even 7s. per head per week. Now, it should follow, from the medical recommendation, that the health of the prisoners would rise in proportion. To determine this question he resorted to statistics. Taking 104 prison returns—which enabled a comparison of the 20 gaols where the expense and the quantity of the diet were the lowest, the 20 where the expense and the quantity of the diet were the highest, and the 20 where they were intermediate between the highest and the lowest—the results came out as follows:—

	Ounces of solid food per week.	Cost per head per week.	Sick per cent.	Deaths per 1000.
Twenty lowest prison diets	188	1s. 10½d.	3	1½
Twenty intermediate diets.....	213	2s. 4½d.	18	3
Twenty highest.....	228	3s. 2d.	23½	4

The results were objected to on the grounds that in some of the larger prisons, where the lower dietaries were adopted, the terms of imprisonment were shorter than in others. But those objections were met by the trial of the simpler dietaries in the same prisons, with the same classes of prisoners, with labour and without labour, for the like periods, where the like results appeared. No doubt changes of diet were beneficial, if not absolutely necessary, for persons in sedentary conditions or prolonged confinements, but variations with simple foods might be made to suffice, instead of augmentations in quantities, and in foods of the more stimulating and ex-

pensive character, beyond those which sufficed for the general population. Later experience was in the same direction."

Hence it appears that animal food plays an unsuspected and deadly part in cases where it is consumed even in moderate quantities, a conclusion which must astound most inquirers, and which ought to weigh with all classes and conditions. Length of days is one of the blessings promised to the faithful, and in this case faithfulness to knowledge offers the same reward. "What man is he that desireth life and loveth many days, that he may see good? Depart from evil (in eating) and do good." We take it to be now demonstrated that good health and length of days are the reward of a well-chosen diet from which animal food is excluded. In relation to this world, no more important truth can be declared, for good health is the most essential element of active life and enjoyment. The exercise of mental and bodily power depend so directly upon its possession, that no society can attain to its full growth or do justice to itself whilst it remains in a practice which preys upon its vitals; nor should the economy of that simple diet which conduces most to health be an unconsidered element: it may mean less labour and more leisure to the overworked, or less confinement and more liberty to the delicate; or less devotion to the body and more to the mind for the thoughtfully inclined; or it may render possible a better education, more spacious and better adorned homes, the cultivation of taste in innocent enjoyment from art—music, drawing, carving, painting—and more extended converse, and, consequently, closer sympathy in the family. Some, perhaps many, of these sources of recreation and delight might be open to the humbler classes in return for habituating themselves to a simple, healthful diet—a change not always the most attractive to the palate until habit has made the best course the most delightful. It must not, however, be understood as absolutely necessary to refrain from delicacies or luxuries on the vegetarian system, nor yet that vegetarian fare is necessarily cheap. Many desirable fruits are, with us, very dear, and, if used at all, must be a tax upon the means of our ordinary population. But we wish to show they are unnecessary; yet, in various ways, a great variety is possible, both in the methods of cooking and in the articles selected, without injury to health, and, indeed, with good effect.

Having shown the advantages of abstaining from flesh, let us add a word to our working people on their peculiar position. It has to them, no doubt, been a stumbling-block that the goods of this world should be so unequally distributed, when they have observed how the intelligent part of society esteem flesh alone worthy to be called meat, and treat other dishes as adjuncts only. If animal food be so necessary and so superior in power to yield strength, they might ask: How comes it that they who have most need of strength get least, and in many cases none, of this necessary; whilst that part of society which has less occasion for strength gets most flesh, and nearly monopolises that class of food? It must appear mysterious. But if our demonstration be sound, it shows, on the contrary, that the necessary and best foods are most abundant, and within the reach of all classes and nations. In that there is no mystery, but supreme satisfaction. It may thus increase their contentment when reflecting on their condition, by manifesting the love of our common Father. This makes the poor man rich, for—

Poor and content is rich;
But riches infinite is poor as winter
To him that ever thinks that he is poor.

(To be continued.)

KAPPA.

MEDICAL AND SCIENTIFIC TESTIMONY IN FAVOUR OF A VEGETARIAN DIET.

[NOTE.—It is not implied that all the authorities mentioned are in favour of Vegetarianism, either in theory or practice. They are quoted to prove facts, rather than to enforce opinions.]

PROFESSOR OWEN.—“The apes and the monkeys, which man nearly resembles in his dentition, derive their staple food from fruits, grain, the kernels of nuts, and other forms in which the most sapid and nutritious tissues of the vegetable kingdom are elaborated; and the close resemblance between the quadrumanous and human dentition shows that man was, from the beginning, adapted to eat the fruit of the trees of the garden.”—*Odontography*, p. 471.

BARON CUVIER.—“The natural food of man, judging from his structure, appears to consist principally of the fruits, roots, and other succulent parts of vegetables.” *Animal Kingdom* (Orr, London, 1840), p. 46.

M. DAUBENTON.—“It is, then, highly probable that man in a state of pure nature, living in a confined society, and in a genial climate,—where the earth required but little culture to produce its fruits,—did subsist upon these, without seeking to prey on animals.”—*Observations on Indigestion*.

M. GASSENDI.—“Wherefore, I repeat, that from the primeval and spotless institution of our nature, the teeth were destined to the mastication, not of flesh, but of fruits.”—*Works*, vol. x. p. 20.

LINNÆUS.—“This species of food [fruit] is that which is most suitable to man; which is evinced by the series of quadrupeds; analogy; wild men; apes; the structure of the mouth, of the stomach, and the hands.”—*Linnaei Amicitates Academiæ*, vol. x. p. 8.

RAY.—“Certainly man by nature was never made to be a carnivorous animal, nor is he armed at all for prey or rapine, with jagged and pointed teeth, and crooked claws sharpened to rend and tear; but with gentle hands to gather fruit and vegetables, and with teeth to chew and eat them.”—*Evelyn's Acetaria*, p. 170.

PROFESSOR LAWRENCE.—“The teeth of man have not the slightest resemblance to those of the carnivorous animals, except that their enamel is confined to the external surface. He possesses, indeed, teeth called ‘canine;’ but they do not exceed the level of the others, and are obviously unsuited to the purposes which the corresponding teeth execute in carnivorous animals. . . . Thus we find that, whether we consider the teeth and jaws, or the immediate instruments of digestion, the human structure closely resembles that of the siamæ; all of which, in their natural state, are completely herbivorous” [frugivorous?].—*Lectures on Physiology*, pp. 189, 191.

BELL.—“It is, I think, not going too far to say, that every fact connected with the human organisation goes to prove that man was originally formed a frugivorous animal. . . . This opinion is principally derived from the formation of his teeth and digestive organs; as well as from the character of his skin, and the general structure of his limbs.”—*Anatomy, Physiology, and Diseases of the Teeth*.

DR. SPENCER THOMPSON.—“No physiologist would dispute with those who maintain that man ought to live on vegetables alone, the possibility of his doing so, or that many might not be as well or better under such a system as any other,” &c.—*Dictionary of Domestic Medicine*, Art. “Food.”

HALLER.—“This food, then, which I have hitherto described, and in which flesh has no part, is salutary; insomuch that it fully nourishes a man, protracts life to

an advanced period, and prevents or cures such disorders as are attributable to the acrimony or grossness of the blood."—*Elements of Physiology*, vol. vi. p. 199.

LIEBIG.—"Grain, and other nutritious vegetables, yield us, not only in starch, sugar, and gum, the carbon which protects our organs from the action of oxygen, and produces in the organism the heat which is essential to life, but also in the form of vegetable fibrine, albumen, and caseine, our blood, from which the other parts of our body are developed. . . . Vegetable fibrine and animal fibrine, vegetable albumen and animal albumen, hardly differ even in form; . . . and when they are present, the graminivorous animal obtains in its food the very same principles on the presence of which the nutrition of the carnivora entirely depends. . . . Vegetables produce, in their organism, the blood of all animals; for the carnivora, in consuming the blood and flesh of the graminivora, consume, strictly speaking, only the vegetable principles which have served for the nutrition of the latter."

DR. LANKESTER.—"Animal food is composed of the same materials as vegetable food. It is formed of the same elements, and presents the same proximate principles."—*Guide to the Food Collection*, p. 79.

MOLESHOTT.—"The legumes are superior to meat in abundance of solid constituents which they contain; and while the amount of albuminous substances may surpass that in meat by one-half, the constituents of fat, and the salts, are also present in a greater abundance."

DR. CARPENTER.—"We freely concede to the advocates of Vegetarianism that, as regards the endurance of physical labour, there is ample proof of the capacity of what is commonly called the vegetable regimen, that is, abstinence from flesh meat, to afford the requisite sustenance. . . . We are inclined, then, to believe that a purely vegetable diet, if it contains a due proportion of oleaginous matter, is capable of maintaining the physical powers of the body at their highest natural elevation, even under the exposure of the extreme of cold, &c."

DR. S. BROWN.—"We are ready to admit that Vegetarian writers—especially the author of *Fruits and Farinacea* [Churchill, London]—have triumphantly proved that physical, horse-like strength, is not only compatible with, but also favoured by, a well-chosen diet from the vegetable kingdom; and, likewise, that such a table is conducive to length of days."—*Westminster Review*.

"DR. MARCET, OLIVER, and other physiologists unite in stating that chyle elaborated from animal food putrifies in three or four days at longest; while chyle from vegetable food—from its greater purity and more perfect vitality—may be kept for many days without becoming putrid."—*Smith's Fruits and Farinacea*.

EDINBURGH MEDICAL AND SURGICAL JOURNAL.—"We have known various persons who have been delivered from painful and obstinate disorders by giving up the use of animal food entirely; and others in whom disorders of the nervous system and the chest have been very much relieved by the same procedure."—*No. 166*.

MEDICO-CHIRURGICAL REVIEW.—"We are by no means sure, indeed, whether the entire dietetic treatment of dyspepsia, ordinarily practised, is not fallacious; and whether, instead of a highly-animalized regimen, it would not be preferable to have recourse to a simple vegetable diet. Mr. Smith [*Fruits and Farinacea*] has collected several cases of the benefits of such a system, from the writings of eminent medical authors, who had no particular doctrines to support, such as Abercrombie, Cheyne, and Thakrah; and from the considerations we have already adduced, we think that a strong case has been made out in its favour."

DR. J. S. WILKINSON.—“It is quite undeniable that many persons are benefited by resorting to such a mode of diet.”—*Literary and Scientific Lecturer*, vol. ii., p. 110.

DR. CHEYNE.—“For those who are extremely broken down with chronic disease, I have found no other relief than a total abstinence from all animal food, and from all sorts of strong and fermented liquors. In about thirty years' practice, in which I have (in some degree or other) advised this method in proper cases, I have had but two cases in whose total recovery I have been mistaken.”

DR. A. P. BUCHAN.—“Of the effects of a regimen of the farinacea, combined with milk and fruits, in subduing the early attacks of phthisis, many examples are recorded; and there would, probably, be many more, were an appropriate regimen adopted rather with a view to prevent than to cure this disease. . . . When there is a tendency to consumption in the young, it should be counteracted by strictly adhering to a diet of the farinacea and ripe fruits. Animal food and fermented liquors ought to be rigidly prohibited. . . . If vegetables and milk were more used in diet, we should have less scurvy, and likewise fewer putrid and inflammatory fevers.”

DR. CRAIGIE.—“Diet consisting of bread and milk, or rice and milk, or the flour of farinaceous seeds and milk, is quite adequate to prevent the formation of the gouty diathesis, and to extinguish that diathesis if already formed. . . . Such diet is also adequate to prevent the disease from appearing in its irregular form, and affecting the brain and its membranes, and the heart or lungs.”—*Elements of the Practice of Physic*, vol. ii. p. 633.

DR. CULLEN.—“I am firmly persuaded that any man who, early in life, will enter upon the constant practice of bodily labour and of abstinence from animal food, will be preserved entirely from gout. . . . The cure [of rheumatism] requires, in the first place, an antiphlogistic regimen; and particularly a total abstinence from animal food, and from all fermented and spirituous liquors.”

DR. S. NICOLLS says (1864).—“This hospital [Longford Fever Hospital] is conducted on vegetarian and temperance principles—not one pound of flesh-meat, pint of whisky, or bottle of wine having been used in it for the last fifteen years,—long experience having satisfied me that animal food, wine, brandy, &c., require to be given with great caution; indeed, I have seen sad results from their use. . . . It may be said that the class of patients was unused to good food and stimulants—therefore did not require them. However, such is not the fact, for among them were officers of this house, members of the constabulary force, tradesmen, gentleman's servants, and others accustomed to substantial food. . . . A large proportion of cases (in 1865) were spotted, with sordes on the teeth, and a tongue like mahogany, and many were brought in with bed sores on their hips and back, and some with gangrene of the toes and feet. . . . Nine persons stricken with the same fever were removed from one house to the fever hospital, and every one recovered, though they got neither wine, brandy, nor animal food. . . . I still continue the treatment which for sixteen years I have found so successful.”

ARBUTHNOT.—“I know more than one instance of irascible passions being much subdued by a vegetable diet.”

HUFELAND.—“The more man follows nature, and is obedient to her laws, the longer will he live: the further he deviates from these, the shorter will be his existence. . . . Plain, simple food only, promotes moderation and longevity; while compounded and luxurious food shortens life. . . . Instances of the greatest longevity are to be found among men who, from their youth, lived principally on vegetables, and who, perhaps, never tasted flesh.”

P.S.—The following may be mentioned as being, entirely or partially, adherents of Vegetarianism:—Daniel, Pythagoras, Socrates, Plato, Epicurus, Plutarch; Cornaro, Milton, Swedenborg, Wesley, Howard, Franklin, Shelley, Newton, Lamartine, Rousseau. Sir Richard Phillips, Ritson, Brotherton, General P. Thompson, and F. W. Newman.

[The testimonies collated above are issued in a Tract, to be sent to medical men inviting their opinions and experience. Friends can be supplied on application to the Secretary. The Executive Committee of the Vegetarian Society also hereby request readers of the *Dietetic Reformer* to call the attention of their friends and acquaintances belonging to the medical profession to the views expressed above, and invite them to write any facts in their experience, whether favourable or otherwise, and send them to the Secretary.]

THE VICTORIES OF TRUTH.

WHAT errors (he that reads may see)
Have rul'd in turn the human race,
Have cried to nations, "Bow the knee,"
And said to hated Truth, "Give place,
No longer let me see thy face!"

What troops have followed at their heels!
What zealots at their shrines have pray'd,
And died beneath their chariot wheels!
What abject homage men have paid!
What gifts upon their altars laid!

But when submitted to the test
Of Time, they fail'd that test to stand;
Then some one, bolder than the rest,
The downfall of their pow'r has plann'd,
And dragg'd them down with daring hand.

But let the friends of Error mourn,
When Error yields her tainted breath;
Truth to eternal life was born;
Her friends shall never mourn her death,
Nor weave for her the cypress wreath.

Time spares not age, nor pities youth;
Man's proudest works he doth abuse,
Yet has no power to injure Truth;
The wasting years but add new grace
And beauty to her form and face.

She will not fail her friends, and none
Shall live to see her strength decay,
Or beauty fade and die: her sun
Moves on towards a perfect day,
Her glory shall not pass away.

And though we perish in the strife,
The truth is not a thing of breath,
And still the truth shall live, though Life
Roll writhing down the jaws of Death
Who too shall die, the scripture saith.

And though he drive us from the field,
And hand us captive to the grave,
From whose black dungeons, barr'd and seal'd,
He calls on Truth her friends to save,
Short is the triumph he shall have.

For He who toil'd at Nazareth
The captive from the strong shall take,
And we shall live and reign when Death,
And he that follows in his wake,
Are buried in the fiery lake.

R. PHILLIPS.

Selected Articles.

VACCINATION VIEWED POLITICALLY: LETTER FROM PROFESSOR NEWMAN.

[From the *Anti-Vaccinator*, of September 25th, 1869.]

DEAR MR. PITMAN,—You call my attention to an article in the *Lancet*, commenting on a private letter of mine to you, which you have thought fit to publish. You kindly desire to print some reply from me. I really think I may claim that you or other anti-vaccinators will make the reply, which is not at all difficult. I have no taste for detailed controversy, especially with an anonymous opponent, and with a medical man on a medical topic. But I regard the political side of the question as the primary. It is not developed in that letter—which I never intended for the public; but I will now enter upon it somewhat more fully.

It does not rest with Parliament to enact how a disease shall be treated. If a bill were proposed to enforce that everyone who is seized with apoplexy shall be bled, the *Lancet* would probably be foremost in the outcry. I should expect it to propound that Parliament is no authority in medicine; that to protect us from dangerous treatment by ignorant pretenders, Parliament enacts medical degrees as mere tests of knowledge, but it must not dictate to those who have displayed their knowledge by gaining the degree.

Nor is it to the purpose to say that Parliament took advice of physicians before it legislated. Some thirty or forty years ago, when homeopaths first disused bleeding for apoplexy and fever, the disapproval of their conduct by the orthodox medical faculty was so universal and so vehement, that Parliament might easily have got medical warrant to enforce bleeding. Nay, one hundred years ago, physicians were zealous for inoculation. My father was with difficulty saved from it by the sturdy refusal of his mother, who said (as she told me) "If God send small-pox on my child, I must bear it; but never will I consent to give it him on purpose: how can anyone know what would come of it?"

At that time Parliament might have been advised by educated and learned physicians to make inoculation *compulsory*; and I make no doubt those physicians spoke as dogmatically to my grandmother in favour of it, as any can now speak of vaccination; yet, by the advice of physicians, inoculation is now made *penal*! It is certainly possible that by the advice of physicians vaccination also will hereafter be made penal. Medicine is a changing and (let us hope) progressive Art; it has no pretension to be Science, or to have any fixedness at all. The editor of the *Lancet* has probably read the article in the *Quarterly Review* of April, 1869, entitled "The Aims of Modern Medicine." It is a storehouse of detailed fact for those who are too young to remember what it narrates of unanimous medical error, pernicious on the hugest scale. Medicine cannot improve, unless the younger and fresher minds among physicians are left perfectly free to deviate from the routine of their elders. Nothing can justify Parliament in enacting a medical creed, or enforcing any special medical procedures.

But if physicians must have hands unfettered, have patients no right to choose their physician?—no right to repudiate treatment which they think quackery? We all ought to be re-vaccinated periodically, according to the *Lancet*. Does, then, Parliament dare to enact such a thing? It does not; else I might be taken by force and vaccinated to-morrow. And if I understand the argument for compulsory vaccination, it cannot rightly stop short of this. I may be told that extreme danger requires extreme remedies. Well—I will put really extreme cases. In an age and country of barbarism, I am seized with the plague, or with a highly-infectious leprosy. If I have the plague, I am to be shot dead with arrows, and mould is to be heaped over me where I lie. If I have the leprosy, I am to be hunted into solitude, and there live, if I can.

The law is hard, yet I might accept my fate without murmuring. One who is *dangerous* to society, whether from contagion or from mania, cannot retain ordinary social rights. Better for me to die outright than to infect my kind nurses, for the miserable chance of lingering. To put me to death for plague is sharp law, no doubt; but the legislator would at least know that a pestilential body, once well

covered with earth, does no further harm, so that the despotism effects its end—at least it stops contagion. I should feel that I died for my country's good. But if he enacted that I should be bled, or should have the sore places cut out, or that poison should be infused into my veins, he could never be sure that the public gained any benefit from his cruelties. A far more overwhelming proof is needed by the legislator than so very shifting a thing as *medical advice*. And here it is advice from one country only in all the world, and that where men peculiarly experienced in vaccination condemn it.

One who carries disease with him is ostensibly dangerous. This—and this only—justifies legislation against him. But when a man or child is ostensibly healthy, no case is made out for legislation at all. To enact that a healthy person shall have a disease lest hereafter he get a worse disease, is a form of despotism hard to parallel; and, what is peculiarly disgraceful, it is directed against innocent infants alone, because they are helpless: it does not dare to attack us adults. This fact justly arouses parents to indignation. Let parliament enact that every M.P. shall be at once vaccinated, and that it shall be done from arm to arm among them, every four or five years, as the doctors may prefer,—if they will enact such things concerning children. The law now says to a parent—“We are alarmed to see that your child has no disease. Cow-pox (for the public good) it must have, with the chance of other hideous diseases: submit, or else make yourself a criminal, have your hair cropped, and dress in prison garb.”

Such legislation implies that parliament is a Medical Pope, and would justify no end of monstrous violations of sacred personal right. The *Lancet* “begs respectfully to tell me” that, in the matter of “vaccine lymph,” “the State (!) and private practitioners take great care.” Is this very comforting—very reassuring—to one who has read Ira Connell's frightful case? I have a paper before me—reprinted from the *Lancet* of Nov. 16, 1861—which contains a detailed account of 46 children in Piedmont being infected with loathsome disease—soon fatal to some of them—from receiving the lymph (called vaccine!) out of the arm of one child called (and supposed to be) healthy. As the surgeon cannot be omniscient, he cannot know the diseases hidden in a particular child; he is not to blame for not knowing; but this is precisely the reason why parliament ought much rather to forbid than to enforce the vaccinating of one child from another. It makes the enforcement so indefensible, that one is unwilling to affix the right epithet.

But, even if cows would kindly get cow-pox for our convenience, so that each child might have the disease direct from the cow, even so it would be blind tyranny for the law to say to a parent—“*You shall not keep your child in perfect health: that is too dangerous a course.*” When to this the parent replies by defiance of the law, and is treated as a criminal, the law-makers are (in my opinion) the real criminals before God and man. Parents who become martyrs by resisting the law, deserve a sympathy akin to those who are martyrs of religion.—Yours, F. W. NEWMAN.

J. STUART MILL, ESQ., AND TEMPERANCE POLITICS.

[The secretary of the United Kingdom Alliance, Mr. T. H. Barker, has been favoured by the Hon. Gerrit Smith, of the State of New York, with the following copy of a letter which that distinguished philanthropist has recently addressed to John Stuart Mill, Esq., on the subject of “Temperance Politics.” The letter will be specially interesting as having been suggested by the correspondence between Mr. Mill and the Alliance secretary, published in the *Alliance News* just before the general election.]

GERRIT SMITH TO JOHN STUART MILL.

Honoured and dear Sir,—A gentleman in England, who is rendering eminent service to the cause of temperance, requests me to criticise your attitude toward that cause. So profound is my sense of your pre-eminent wisdom—perhaps, well-nigh as profound as was Buckle's sense of it—that I could not, without heavily

taxing my diffidence, presume to criticise you in any respect. Nevertheless, I venture to comply with the request.

The gentleman I refer to would have Government shut up the dramshop.* You would have Government leave it open. How shall so wide a difference on a subject of so vast importance be explained? Is he more radical in his theories than you are? Probably not. Few of the world's great writers are less cramped than yourself by the spirit of conservatism. Are you less disposed than he to reduce radical theories to practice? Your admirable pleas for woman's voting prove that you do not shrink from the boldest practical innovations. This wide difference must be otherwise accounted for. Perhaps, whilst his philanthropy is particularly moved by intemperance, yours is by some other vice or suffering. Or, perhaps, it is to be accounted for, in part or entirely, by the supposition that you are especially jealous of the interference of society with the rights and practices of the individual, and he, of the interference of the individual with the interests and welfare of society. On this supposition it is quite natural that one of you should argue the right of the individual to buy or sell drams, and the other the right of society to punish him for such buying or selling.

You make the province of civil government much narrower than most do. I (though not forgetting that, in doing so, I go against the judgment of many a man far wiser and better than myself) make it still narrower. For instance, whilst you would have Government compel the idler to work, I would let him remain an idler, should moral influences prove inadequate to change him; and whilst you would have the parent compelled to educate his child, I, with my dread of all possibly avoidable compulsion, would look to his enlightened and benevolent neighbours to supply, as far as they can, the unnatural parental lack. Again, I would have Government shut out not only from the church but also from the school. It should have nothing to do with either. Then, too, I would have the right to buy and sell so free, as not to leave a custom-house upon the earth. Nor would I allow Government to concern itself with the cause of temperance, nor with any other moral reform, nor with asylums for the blind or the deaf mutes, nor with any other benevolent institutions. Why, then, you will ask me, am I in favour of the enactment of sumptuary laws? I am not. Families should be left to dress as they please, and to eat and drink what they please. There should be no laws to regulate living. If, in saying so, I open the way for the question—how I can then consistently be in favour of Government's shutting up the dramshop—my reply is that this question will be answered in what I shall say of the province of Government. I have said what is not its province—in other words, what it should not do. I will now say what is its province—in other words, what it should do. It should protect person and property; and it should attempt nothing more. Its one work is to hold a shield over its subjects beneath which they can, unjostled by each other, and secure from foreign aggression, pursue each his own chosen calling, and each live out his own views of life. The protection of person and property being its sole office, Government is to protect society not only from the criminal but from the insane, be it liquor or disease that has produced the insanity. Hence, whilst we are to look to enlightened and benevolent persons for asylums for the sick and poor, we are to regard lunatic asylums, including inebriate asylums, as part of the machinery of Government. By the way, the almshouses and kindred institutions would scarcely be needed were the dramshop abolished. Rare, in that case, would be the person who is so impoverished or debased, as to cast himself upon the public charity; and rare too, in that case, would be the person, whose friends are so impoverished or debased, as to allow him to be cast upon it.

If I have rightly defined the office of civil government, then, manifestly, were every part of the earth to be blessed with a true civil government, there would not be so much as one dramshop left in any part of the earth. For what is the dramshop but the great manufactory of incendiaries, madmen, and murderers? Its staggering army in Great Britain counts up nearly a million; in America scarcely less. Because of the dramshop hundreds of thousands of British and American families are deep sunk in misery, stricken with terror, and not a very small portion of them besmeared with blood. Because of the dramshop night is so often made

*The practical proposition of the Permissive Bill is something short of this: It is that the people should have the power of local option or veto.—T. H. B.

hideous in Britain and America by screams of "murder," and sunrise made sorrowful by its revelations of the deeds of drunkenness. And, yet, even John Stuart Mill will not have Government suppress the dramshop! Its evils, surpassing the sum total of all other evils, stare him in the face—and yet he allows himself to be swayed by that microscopic view, which detects in such suppression a particle of seeming sumptuary legislation! Pardon me for being reminded by your hypercritical and fastidious objection to the only way of salvation in this life and death case, of the old story of the extreme ceremoniousness of the gentleman, who made his never-having-been-introduced to the drowning man his excuse for not rescuing him. Even if there is in this proposed suppression of the dramshop something of the form or semblance of sumptuary legislation, there, nevertheless, is not the least spirit of it. Moreover, were it so that, incidental to this suppression, there must be violations of some minor rights and inconsiderable interests, no account should be made of the violations, but all of them should be forgotten in the joy of the accomplished object.

I admit that the shutting up of the dramshops might put some families to a little inconvenience, if not also to a slightly additional expense, in obtaining alcoholic liquor. I admit, too, that, whilst it is not only unnecessary but pernicious to persons in health, there is occasionally a bodily ailment in which, provided there are not other remedial agents of similar effect at hand, such liquor is useful. But to make trifles like these excuses for keeping open the floodgates of the deadly dramshop argues the impossibility of finding worthier excuses for continuing the murderous wrong.

I do not forget that, although you would leave the dramseller unpunished for keeping a soul-and-body slaughter-house, you would have his customer punished for the violence of which he may have been guilty in his drunkenness. But to make this the only security against such violence is too much like stipulating with the men, reckless or malignant enough to bring fire into the powder-house, that they shall not be punished until an actual explosion has come of their recklessness or malignity. Surely, surely, London is entitled to more security against dramshop violence than this, which you propose—yes, to immeasurably more, seeing that, probably, never a day passes without some of the dramshops being chargeable with one or more deaths. The deaths may be from suicide or murder—produced suddenly or gradually—nevertheless, they are all dramshop deaths.

I do not forget the frequent cavil, that, even were the dramshop shut up, drinking and drunkenness would not therefore be diminished. Nevertheless, overwhelming are the proofs that the drinking and drunkenness are in proportion to the temptations—in proportion to the frequency and attractiveness of the places for gratifying the unhappy appetite. Of course, no one is less chargeable with such cavil than yourself. For your argument against shutting up the dramshop is the solemn one that human rights would thereby be invaded—invasion by lessening the facilities for tipping and drunkenness! I scarcely need add that the cavillers I refer to entirely ignore your argument. With your fear of the increased difficulty of getting rum they have no sympathy. Their confidence that rum will still be within as easy reach as ever remains undiminished.

How sad it is that even the wisest and best of men do, by getting used to crimes—to the presence of criminal usages—become patient with them! Possibly, before the year is ended, thousands of shops may be opened in London for the sale of a newly-discovered gas. It will craze no small part of their frequenters. Some of them it will turn into incendiaries and some into murderers. Nevertheless, so attractive will be the gas that scores of thousands will go to inhale it. No sooner, however, will the effect of it be well ascertained than petitions for shutting up these gas-shops will pour into Parliament. Amongst the most influential names upon them will be your own. The gas-shops, unsustained by the plea of custom, would be tried solely by their character, and would, therefore, be as quickly and as thoroughly condemned as would be the dramshops, were they also unsheltered by this plea, and put on trial for their character only—their emphatically infernal character.

We are both in favour of having the people own Government instead of being, as is the case in many nations, owned by it. Hence we both deprecate Government's travelling beyond its legitimate limits. Could it be kept within them, it

would be a blessing above all price. Travelling beyond them it becomes an evil, not only from its meddling with matters which do not belong to it, but from its consequent neglect of its own proper duty. Has it never occurred to you, that the most effective way to recall Government from its meddlings is to hold it firmly and constantly to the discharge of its one duty to protect person and property? When it shall have been brought to see that, in leaving the dramshop to pour out destruction and death, it leaves person and property more unprotected than from any or all other causes; and when it shall, consequently, have been brought to see that it has no higher duty to perform than to shut up this fountain of woe, then will civil government be in a process of education and change, that will leave it no taste nor time nor talent for continuing its usurpations. And then, with hands filled with its legitimate work, and heart filled with zeal to perform it, and destitute alike of affinity and ability for every other work, civil government will realise the sublimest expectations of the most enlightened and philanthropic statesmen. In that day, it will be held, not only that civil government has the right to shut up the dramshops, but that, wherever it fails to exercise this right, it fails to prove itself worthy of the name of civil government.—With the highest regards, yours,
GERRIT SMITH.

THE NATIONAL HEALTH.

THE *Westminster Review* for the current quarter has reached a second edition, the cause of the extraordinary demand for the number being a remarkable article on "Prostitution in Relation to the National Health." The difficulty and delicacy of this subject have prevented its full discussion, and the result is that there exists amongst all classes a vast amount of ignorance with respect to it. A writer in the *Westminster Review* brings to the investigation he has entered upon a full knowledge, a powerful pen, a thorough consciousness of the importance of the work he has to do, and, considering the subject, he avoids everything which may be called offensive. He states his facts in plain, unmistakable English, it is true, but this is no doubt the best mode of treating a subject of such vital importance to the community; and while he pays no respect to the false delicacy of the time, his language is as pure as his evidence of the existence amongst us of a terrible social pestilence is abundant. We cannot quote the whole of the article, which is a long one, but the opening, which is as follows, will show the object of the writer:—

"We purpose in this article to examine a disease which is at once social, moral, and physical, and, especially, to exhibit the nature and extent of its agency in destroying the health and vigour of a large proportion of the inhabitants of the British Islands, tainting their blood with an ineradicable poison. Of all the maladies with which humanity is afflicted, prostitution is, we believe, the worst: its causes are the most persistent, its physical effects are the most terrible, its social and moral complications are the most numerous and inextricable, its whole aspect is the most saddening, and its cure is the most difficult. Amongst the social problems which it behoves philanthropists and statesmen to solve, this—*how may prostitution be annihilated?*—stands pre-eminent; and though, together with the several subordinate ones related to and grouped around it, urgently demanding solution, it is seemingly the most insoluble. The mere statement of the elements of the question is beset with almost insuperable difficulties; how much greater, therefore, must be the barriers opposed to its exhaustive discussion? By conventional agreement society is forbidden to speak on the subject unless in whispers; and he who ventures to write upon it in a journal for general readers must either suppress many of the most important facts and arguments relating to it, or run the risk of damaging the medium which he uses.

"Women, who ever, as a rule, shape their conduct conformably to the views and wishes of men, offer the most powerful conservative resistance to any agitation of this momentous topic: many observe and impose the silence of hypocritical ignorance—feeling constrained, while wholly conscious of the vast importance of the evil in question, to act and speak as if unaware of its existence; and many more, from genuine delicacy, avert their eyes and resolutely ignore it. But surely

this ostrich-like cowardice or timidity cannot continue much longer! It seems impossible for English women to persist in ignoring a social evil, the disease incidental to which is undermining the strength and indirectly destroying the lives of a large proportion of the adult male population—of their brothers, their sons, and their husbands, and which is directly destroying their infants, both before and after birth. We trust that social propriety and true feminine delicacy will always be held sacred; but there is a false delicacy which is alike hostile to needful physiological knowledge and physical well-being, which is incompatible with a healthily-constituted mind, and which ought to be resolutely put away; and there are occasions when even true delicacy must suffer violence if the lives and welfare of others, or self-preservation, cannot be otherwise insured. When, as a genius of beneficence, Florence Nightingale encountered the horrors of the military hospitals during the Crimean war, she gave practical recognition of this duty.

“But it is not on behalf of others only that we now appeal to English women—it is equally and still more urgently on behalf of themselves. Thousands upon thousands, chiefly of the lower classes, but partly of the higher, are the innocent and defenceless victims of a pestilence whose march is so secret, and whose attacks are so insidious, that none can be certain of escape; many a trusting maiden radiant with happiness, health, and beauty, who gives herself in marriage, speedily finds her joy turned to mourning, her health to disease, and, it may be, her beauty defaced by its loathsome poison; many a mother has to deplore the contamination, not only of her own constitution, but that of her child, to which, either before or after birth, in countless instances that poison proves fatal. Thus the social malady which we now propose to discuss is vitally interesting to woman: it affects her both as a wife and as a mother, and while destroying the health of herself and of the dearest objects of her affections, too often blights those affections themselves. Suffering as she does from its effects, shall she be restrained by conventional prohibitions, or even by her own sensitive delicacy, from manifesting her interest in it, from exerting her influence at once to repress it and to remove its causes, or from labouring in every possible way to place herself and those related to her out of danger? On the contrary, we believe that this is precisely one of those subjects which it is her most solemn duty to examine for herself. We believe that *only* through the resolute co-operation and influence of women is any great and permanent diminution of the evil in question possible. If the sexual relation is to be ennobled, if passion shall ever be so restrained as to become only the intensest expression of affection, if love shall ever be so purified and hallowed as never to degrade and sacrifice, but always to exalt and bless its objects, women will assuredly be the chief agents of the change. So greatly do our hopes of social amelioration depend on the co-operation with wise and earnest men of intelligent and beneficent women, that we entreat their attention to the facts we are about to describe. We shall say nothing but what a most delicate and refined woman might listen to from her physician, nothing but what every woman, if she be capable of understanding it, should, in our opinion, know. On this subject we believe the language of simplicity to be the purest and the least calculated to offend the most delicate nature. But the contemplation of disease, of which we shall have much to say, is always painful, and not seldom revolting; no painting can make the pictures of it pleasing; and especially would the attempt be futile with reference to those diseases the character and magnitude of which it will be our duty to portray.”

The writer points out that according to the Registrar-General's returns 408 deaths occurred from diseases associated with the vice of the streets, and that this number, great as it is, gives no idea of the real amount, as from the shame attaching to the disease it is assigned as a cause of death in public practice only, and seldom or never in private practice. A human organism once tainted can never be restored, he asserts, to the condition of health and strength which it might otherwise have enjoyed, and this it is that makes the subject of so great social importance. In the conclusion of the article the writer gives his opinion of the Contagious Diseases Act in these words:—

“Prostitution presents two aspects—one social, the other physical, and hence two questions for solution. First, how may prostitution be eradicated? And, second, until it is, how may the diseases engendered of it be extirpated, or at least reduced within the narrowest possible limits? Any adequate discussion of the first

involves such a wide and comprehensive consideration of every aspect of the relation of the sexes, as few men, if any, of the present day are duly qualified to undertake; the other, dealing only as it does with certain results of prostitution—the diseases we have described—is more simple, and this we propose to grapple with hereafter, and pledge ourselves to prove that this question can and ought to be practically dealt with, that the plan of dealing with it now vigorously pressed on the Legislature of extending the Contagious Diseases Act to the civil population will both signally fail to accomplish the object in view, and will itself entail evils far greater than those it is intended to remedy, and that there is a plan open to no such objection, in harmony with the free spirit of English institutions, which, if practised, will be successful, and which it is our intention fully to explain in a succeeding number of this *Review*.”—*The Western Daily Press, Sept. 20th.*

PHYSICAL HEALTH, STRENGTH, AND ACTIVITY CAN BE REGULATED BY DIET.

THE vitality of plants, the muscular activity of all animals, and the mental as well as muscular and organic health and vigour of man, depend on phosphorus. These are legitimate inferences from facts, presented clearly, as you shall see, in the organisation of plants, animals, and man. In grains and all seeds, the phosphates which give vitality, and furnish food for the brain and nerves, reside in the germ or “chit,” while the fixed phosphates, which are devoted to bones, &c., are mixed with gluten in the crust under the hull, as seen in the plates of corn and wheat. That the phosphates are concentrated in the germ of all seeds, and that they vary in different seeds, is easily ascertained by chemical tests applied to the grain or seed.

It is thus ascertained that some seeds and some grains contain two or three times as much phosphates as others. Wheat, for example, contains two per cent, while millet four per cent. Grass seed from six to seven per cent, and some, as clover and herds-grass, from seven to nine. In all seeds and roots and nuts, which germinate from chits or eyes, the phosphates centre about these eyes, and what is not found there, is always found connected with the muscle-making part of the grain or fruit, showing that the phosphates are connected with vitality and the life-giving principle.

The same thing is shown in animals by a test of their flesh, and by their manner of living. The flesh of quadrupeds and birds, and fishes, contains phosphorus in just the proportion to their natural activity, wild animals much more than domestic; the most active birds, like the pigeon and migrating birds, much more than domestic fowls, and quiet and lazy birds. The migrating fishes, whose astonishing muscular power enables them to swim up rapids and over falls, contain more phosphates than the flounder and halibut, which are clumsy and comparatively dormant.

Insects abound in phosphorus in proportion to their activity and strength of muscle, and among them are the greatest gymnasts in the world. The leap of a flea is as great in proportion to size of muscle, as if a man should jump over the Atlantic Ocean, from Boston to London; and a beetle, not weighing a scruple, will lift and move a junk bottle with contents, weighing a pound—a weight more than one hundred times as great, in proportion, as Dr. Winship could lift (and the beetle wears no yoke). Being wanted for scientific purposes, a beetle was placed, for safe keeping, under a bottle filled with liquid, in the inverted cup made in the bottom of the bottle. Immediately the plucky little insect was seen walking off with the bottle on his back—as if the strong doctor, being shut up in his own office in the basement of Park-street Church, with a steeple two hundred feet high, should hoist the old thing, steeple and all, over into the cemetery.

The active bird lives on active insects or small seeds, which contain the most phosphorus, while the sluggish hen or robin is content with corn or worms, which contain much less of the life-giving element; and migratory birds, while they remain quiet, raising their young, live on worms and berries, but in the fall get a supply of strength for annual flight by eating seeds and active insects. The king-bird is the smartest little bird in New England, and gets his name from the fact

that he governs all other birds—large and small, or drives them from his domain if they give him offence. Even the hawk, which is such a terror to other birds, seems to be a source of amusement to the kingbird. Many a time have I seen this little bird, not one-tenth as large as the hawk, flying just over his back in the air, keeping out of his way by superior activity, occasionally pouncing on him, and giving him such annoyance that he was glad to leave the neighbourhood to escape his little tormenter. A brace of these jolly and eccentric little kingbirds are just now affording infinite amusement to the denizens and visitors of Chester Square, in Boston, June, 1867. Having, according to the custom of other royal families, selected a beautiful city residence for a part of the year, and having built their nest, and the queen being engaged in matters pertaining to the perpetuation of royalty, the king is obliged to entertain visitors. This he does by pouncing on the backs of dogs and driving them from the square; diving at the bright buttons on the policemen's coats; knocking off tall, black, awkward stove-funnel hats, &c. Looking out of my office window, which looks over an open lot to the square, the other day, I saw this kingbird pouncing with tremendous vigour into a thicket of shrubs, and soon came out a big cat, escaping as for life, to the nearest shelter, with the little bird every moment striking at his back and head. This little kingbird lives on bees and hornets—insects proverbial for their industry, strength, and persevering activity—and on flies, whose activity keeps them up in the air for amusement, and the bird amuses himself in catching them; and thus it is clearly established that active animals require food which contains more phosphorus than inactive animals, and the inference is conclusive that man also will have more or less activity of brain or muscle in proportion to the elements he takes to feed the brain and muscle.—*Philosophy of Eating.*

DR. MUSSEY ON HEALTH.*

[From *The Radical* (Monthly), for January, 1869. Boston, U.S.]

(Continued from p. 69.)

BUT to return to the point, as to what feeds the world. Look first at the great flesh-eaters, — the inhabitants of Northern Europe, Eastern Asia, and North America, the Laplanders, the Tungöoes, and the Buracts. They are the weakest and least brave of men. Take some of the New Zealand tribes,—eating like cows, on all-fours, tearing a smoking hog to pieces with their fingers, and eating all up,—flesh-eating monsters! They are the most savage and unhealthy of men; while their children, fruit-eaters during youth, are healthy and mild. They get disease and savageness when they leave the fruits for flesh. Take a tribe of one of the Westmann Islands. The people die rapidly, and have few children. They live on eggs and birds almost exclusively. But the Irishman with his potato lives to old age, and the number of his children we know. On the other hand, look at the fifteen or sixteen cases which the doctor cites. 1. Some tribes in the South Pacific. Excel in beauty and grandeur of form. Few cripples or diseased persons among them. They are entirely fruit and grain eaters. 2. The earlier Greek athletes. Very powerful. Ate no animal food. 3. The Saracens under Mohammed. A terror to Southern Europe. Heroes. Food, water, milk, vegetables. And so their great chief, Omar. He, too, lived entirely on vegetable food. Celebrated for his endurance, purity, genius. 4. A tribe at Jenno, east of Cape Mesurado. They have flesh which they can have if they would prefer it. They do prefer fruits and vegetables. A stronger race of men not to be found. 5. The Spanish peasants. Food, milk and wheat flour, or bread steeped in oil, or bread and cheese. Great labourers. And one traveller says they are the liveliest, healthiest, best-favoured peasants he has seen. 6. The inhabitants of East Scotland. Strong, large, healthy. Diet, vegetables and oat-meal; no meat. Scott speaks of the "hardy warriors of Douglas who lived on the oat-meal taken from the bag suspended by the great chimney." 7. The Russian grenadiers. Called the "finest body of troops." Food each day, one pound of black bread, and half a pound of vegetable oil. 8. The porters of Smyrna. Carry through

* *Health; Its Friends and its Foes.* By R. D. Mussey, M.D., LL.D. Boston: Gould and Lincoln.

the streets on their backs four-hundred-pound boxes of sugar. Some take up nine hundred pounds of boards for a single load. Food spare; coarse bread, figs, other fruits, water. 9. The blacks of South Carolina,—field hands. Live on sweet potatoes and corn meal. Healthy during the malaria. But if they become house domestics, and live more generously, subject to malaria. A proof that the fever is kept off more by the careful diet than the black's constitution. It is also said that the young field hands, who subsist entirely upon fruit and grain, learn much better than the home servants, who eat everything. 10. The famous Cherokee *athletæ*. They play a most bellicose game of ball of two hours' duration, taxing their muscular system to the utmost. Their food is corn meal. Sometimes those who eat flesh enter the lists. At first more vigorous than the others. But never endure so long as the corn-eaters. They fail in breath. 11. The Chili miners. Carry stones of three hundred and sixty pounds' weight on their backs from the bottom of the mines, three hundred feet deep. Have no ladders to go up on. Diet, very seldom meat. Usually harrirot bean and bread. 12. The hardy pupils in the old Persian schools. Trained, according to Xenophon, to heavy camp exercise and severe hunts. Very strong. Food, bread and water-cresses. 13. The *athletæ* of the Himalaya Mountains. One of them is often stronger than three Europeans. Can grasp a man at the breast and back between their palms, and lift him at arms' length. Never eat meat. 14. The trappists of Kentucky. Labour each day twelve hours. No cases of cancer and liver disease. Hardly any sickness. Live to great age. When the Western fever and cholera have raged about them, they were exempt,—not one case of sickness. Food, vegetables and milk.

Nor do these statements as to masses of men exhaust the subject; though it must be admitted they make out a splendid case for grains and vegetables as against beef and luxuries. As facts making against the necessity of a meat diet, we think them victorious. Whether they prove more, we do not discuss. But, besides these cases, the doctor adduces others of individuals which are valuable. He alludes to the great world-geniuses, Pythagoras, Plato, Newton (when at his heaviest work), and Descartes, who managed to subsist their minds and bodies to boot without patronising the butcher. To one Colonel Twitchell, who found himself a bankrupt. He made a resolution to eat no meat or rich food till he had paid his debts. A very blessed resolution, worthy of being followed in honest Boston. Had been troubled with cold feet and little coughs. But, bravo! his bread and water helped him to perfect health and a fortune. To Colonel Haskett. In perfect health. Walked two thousand miles in ninety days, on fifteen, eighteen, twenty ounces of bread, with one or two quarts of water, per diem. To Dr. R. Jackson, a British surgeon. He boasted that he had worn out two British armies in two wars, and could wear out a third. He never ate meat. To the Arabs of the desert. Perfectly healthy. Live, some of them, to 200 years. They subsist on very moderate quantities of camel's milk. On so little, in fact, that sometimes, upon an autopsy, their stomachs are found greatly contracted. These Arabs are as hardy and fiery as their splendid horses. Finally, he tells the story of a miser and his new wife. At forty, the miser proposed marriage with a rich widow. The widow possessed the blessing of wealth, but not health. His protestations of affection were the strongest. "He loved the very *ground* she walked on" (she was a large holder of real estate). But the widow was out of health. Constitution shattered. Very much reduced. Stomach used up. The marriage took place. And her ardent lover, whether, as was surmised, to bring a seasonable issue to her existence, and thus get the property, or to keep her and himself from debts at the butcher's and grocer's, proceeded at once to put her on low diet. She descended to corn-meal bread, hasty-pudding, and boiled potatoes. But the miser's ambition overleaped itself. The widow became healthy, and added to her life fifteen years. So much, then, for a simple diet. In fact, from a moral point of view, the doctor is sure that an unstimulating diet of grains tends directly to make people calm, pure, happy. He alludes to the beautiful type, the Quaker family; cheerful, healthy, moral; eating, of course, little meat. And to a flesh-eating and most fierce Auburn prisoner. He was most dangerously violent; but at once became quiet and docile on a bread and vegetable diet. It was the only thing which would bring him to terms. The world at large, therefore, attests to the fact that hardihood and health may go with the grains and fruits. The outlet and turtle may be very nice and palatable, but labour can go on bravely without them.

But we must not dismiss the doctor's book quite yet. His second cardinal rule as to health refers to *quantity*. He insists on a moderate amount of food for the maximum of health. Especially does he insist on this for the ailing person, and for that unfortunate individual among the class who carries in his body a bottomless pit, a bad stomach. He admits that a man may drink deeply and advance to ninety, or eat heartily and live as long. But do you want brilliant nerves, clear tissues, blood that can leap and bound because unclogged by the weight of an august dinner, a brain whose tides of light will run through the year with little ebb? then, he says, look to the amount of what you eat. And if you are a melancholy, pulled-down reprobate of a dyspeptic, here, here is your salvation. We will close what we have to say by giving a few of his capital illustrations upon the point.

First, as to the general matter of quantity. He thinks that from one to two pounds a day furnish sufficient nutriment for the body to do its work. And facts which we have gleaned from other sources lead us to believe that his rule could be made universal, and the race be better off. It is said that in Central Brazil there are tribes who are as muscular as any men to be found among the Caucasians, and as hard labourers too. They eat but one light meal a day. A cup of coffee takes the place of the others. The Egyptian peasantry are a very fine class of men. Hire them for a Nile expedition. They will bake their bad flour in a heated hole in the ground, throw the rock-like lump into the boat, work all day at the oar, or at the pole or line, and then, chipping off a piece of the bread, as big as an orange, with an axe, will soak it in the muddy Nile, and eat it as an abundant supper. Breakfast, the same. In many parts of India, too, where the labourers compare quite favourably with the English, their diet is almost exclusively rice, and small at that. Four cents a day pays their wages. They will live on one, and lay up the other three. John Wesley did enormous work. He averaged eighteen hours a day in labour. Rode thousands of miles (seven hours a day for months on horseback). Preached thousands of sermons (often five a day.) Published over forty volumes. And lived strong till ninety. Jonathan Edwards was a great student. What he accomplished we know. His allowance was a pound for a day. Many English poorhouses and workhouses give out daily rations of two and three pounds. The work done and health accruing are not the maximum. But those work and poor houses where the daily allowance of a pound and a half is given make the best exhibit of work, and health too. We all know of the alertness and military prowess of the Bedouins. Yet the majority of them eat but six ounces of food a day. Often six or seven dates soaked in melted butter give them all their food for twenty-four hours. The addition of a little ball of rice is considered a luxury. The case of an English captain is cited. He was taken prisoner at Algiers. He lived nine months on one pound of black-bread and a pitcher of water a day. Moreover he did hard work. Yet he was perfectly well. A Mr. Reed lived twenty-eight days on thirty pounds of corn. Stronger than ever at the end of the four weeks. He alludes also to several cases where men have lived for years healthfully and happily on apples alone. But, without mentioning more, what we have shown ought to be conclusive. And when we consider the feasting habits both of past and present, and their consequences, stupidity of mind, loathsome disease of body; when we remember that letter of Cicero, describing a supper at his house,—his illustrious guest, the bald first Cæsar, preparing for the battle at the board by an emetic taken just before the repast, that he might feast high and long; when we recall that famous German Krocher who put down into his capacious stomach a whole calf in twenty-four hours; the hungry Texans in the mountains, grumbling because they could get but seven pounds of Buffalo meat for each man per diem; and the numberless great suppers of everyday occurrence, paid for by precious headaches, colds, neuralgias, restless nights and fevers, and followed by other not very pleasant consequences, poor sermons, poor briefs, poor fields, poor money-drawers,—these melancholy things should cast a light upon the fact as to the alliance of simplicity of diet with health and happiness, and make men cease to be fools at their meals.

One word more for the sick man. We have current some very delightful rules as to the healing art. One is, for example, stuff a cold. A second, fill up the body, if you feel weak. A third, decidedly Napoleonic, is, a man, like an army, moves on its stomach. And the joke is, a person seems to use these charming rules

all the more as he grows sicker and weaker, until he winds up with a fever or diseased bronchial tube. Now we venture to say that in New England every year thousands fling themselves into graves by their excesses at the table. Nay, thousands do it, believing the excess a necessity. And we are sure that the saving gospel to thousands of invalids around us is, "Limit your diet. Don't starve. Don't eat sawdust nor drink skim-milk. But cut off a respectable portion from every meal." Look at these rules. Stuff a cold! The very condition of a cold's departure is that the system must be freed from an excess of solids and liquids. Feed up, if you feel weak! The very thing which often makes weakness is too much food; the chemical laboratory of the stomach becomes used, and needs rest; and to eat adds to the weakness. We never work a weary limb to get strength. We let it be quiet. And of the two kinds of overwork for the poor body, common labour and the overtaxing the chemical power of the assimilative and digestive organs, we know that where one man gives out from the first fault, fifty give out from the second. Work a battery of the chemist to excess, and it is done. Give the inner bodily tissues enormous labour by flinging to them vast quantities of food to be made into blood and fibre, and these batteries are damaged. But let the tissues be relieved, and work moderately, and then, soon, daily labour will be invigorating. The strains which bring disease are not usually on the muscles or brain, but on the digestive and other internal organs. And now, what the remedy?

The doctor answers, reduce your feeding. He tells of a child, quite sick and feverish, and living, said its mother, in a most careful way. What was the careful way? "Oh! it has just taken the breast of a chicken, a piece of apple-pie, a slice of cake, and only a mug of tea; nothing more." He mentions a sick student, used up from a cold and bilious attack. The poor sufferer had been reducing his diet. Had just eaten only a piece of mince-pie, ditto of squash, two large slices of buttered bread, a piece of pound-cake, and drank seven cups of tea. Famishing fellow! A wonder of abstemiousness! Now perhaps these are uncommon cases. But it is still true that two-thirds of New England, by leading not an active, robust life, but a quiet one, by feeding at almost every meal a trifle more than it ought, finds that in the course of weeks or months, at any rate, years, it has rolled up these trifles, so as to make a great excess, like the invalid's fast on pound-cake and the seven cups. The result in the two classes of cases is the same.

He tried his cure on a miserable asthmatic. Had had in a year a dozen convulsive attacks. A short diet of bread and water cured him. He tried a merchant. Had most severe pains in the region of the bowels, and was reduced. His physician told him to feed up. Accordingly brandy, beef-steak and wine, were largely appealed to. But no better. While bread and water, in small quantities, cured him, and he grew fat. A boy was afflicted with constant vomitings for months. Became a skeleton. Nothing would help. The doctor began treatment by a table-spoonful of milk a day. Gradually increased the quantity. Was cured. A person was reduced very low from indigestion, with a voracious appetite. The doctor put him on four ounces of crackers for eleven days, and five for the next twenty-eight. The result was, the craving ceased, strength restored. Dr. James Jackson tells of a convalescent from lung difficulty, who *gained* flesh on two crackers a day. We have all heard of the crusty Englishman, Dr. Abernethy. He probably helped more of John Bull's subjects out of bilious troubles than any other physician. And his one solitary rule for a man sick from indigestion was twelve ounces of coarse bread per diem, with an interval of six hours between meals. The recipe cured hundreds. He cites the case of a woman who constantly lost flesh as she increased her rations, and as constantly gained as she decreased the food to a specific quantity. And now for the case of Jervis Robinson. He was a ship-builder. At thirty-two he was a profound dyspeptic, weak as water. Tried the filling-up system; attacked every day luscious buttered beef-steak; but grew worse. At last tried the radical's diet. Ate, for four months, three ounces of wheat-meal per day, one ounce at each meal. For liquid, to a third of a gill of water at each meal, or a gill a day. At the end of sixty days had lost twenty pounds. But bowels became regular. Kept on his strict diet sixty days more, leaving off the third of a gill of water for supper. And then, behold! at the end of the two months, on three ounces of food a day, he had gained twenty pounds. Was well. And, moreover, was always satisfied with his meals. Now we beg to say that this case is most remarkable

and instructive. Dyspepsia is the small dragon which accompanies a third of the people of New England. It seems to go with them, like the little dog following in the street. We are aware of the usual remedy—the pill. The doctor mentions one semi-martyr who swallowed in four weeks six hundred Brandreth's pills. And another who put down one thousand three hundred Morrison Boluses in six months, or eight a day. We know a man who for twenty years paid out twenty-five hundred dollars for patent medicines. He took every quack preparation he had ever heard of, and the day of his death sent off for a new medicine. He had emptied into his stomach four thousand boxes of pills. And finally would buy medicine by the wholesale, put his pills into a bean-pot, and take a heaping teaspoonful every twenty-four hours. It may be refreshing to know the result of this magnificent dosing. He *finally* died. But there is a more excellent way than this. It is the rule as to quantity. And we are sure, as blessed old Amos Lawrence used to say, there is more exhilaration and inspiration to be got from a temperate diet than from all the baskets of champagne and choice cuts of marbled beef in the world. Louis Cornaro is, of course, a classic example. At forty he was in consumption, and given up. He took to a careful diet, and ate for the next fifty years but twelve ounces of food a day, drinking but the same number of ounces of liquid—two tumblers of wine. Twice he deviated from his rigorous rule, and paid a severe penalty in each case. But the diet made him strong and happy. At eighty he wrote a book on the pleasures of temperance. And, moreover, at forty he was poor, though a nobleman. But after recovery he purchased a farm, did his farm work on the twelve ounces, and grew rich. It is known, too, that our venerable Dr. Jackson (a name never to be mentioned without respect), considerably changed his views in later years, as to the matter of *quantity* and *kind* of food in connection with lung diseases. He believed that in very many cases a diet of very moderate quantity, and, moreover, mostly *vegetable*, would furnish a far better remedy than any other. And the reason is clear. In consumption, the system is weak. The organs are enfeebled. Part of the chemical apparatus has collapsed. And the remedy lies in applying the same law to the body which you would apply to a horse wearied out, or a brain exhausted from thinking. It wants rest. Give the internal organs little to do in the way of assimilation and digestion; let nature, the great curer, have time to clean out foul matter from the tissues and great organs, and then assert its own force. Do this, and you may expect fruitful results. Finally, the testimony of another distinguished physician is in point—that ornament of his profession, that representative of our bright gift of brain, that Christian man, Dr. John Ware. Unfortunately, he has left us for the higher and holier walk. But his magnificent power of judgment will long be remembered in Boston. At first, the doctor treated cases of indigestion in the old way; believed in the generous breakfast, dinner, and supper; generally advised the dyspeptic to eat at least a pound and a half each day; nay, would advise this quantity with medicine, rather than less without it. But later he revolutionised his system, and confessed his mistake; and his own later diet is not a bad prescription for all suffering from that unamiable devil, a torpid liver. Breakfast, one cup of tea (or coffee), one baked apple, one thin slice of toast. Dinner, a piece of meat as large as your two fingers, one tablespoonful of squash, and one of potato, or their equivalent. No more. No bread, no pie, no pudding, no dessert, nothing more, except part of a tumbler of water. Supper, a baked apple, and at times a cup of tea. Before retiring, took a cup of milk boiled with half a cup of the hulls of wheat (which, by the way, to our own disadvantage, we give our horses under the name of "shorts"). That new diet he used to remark made him a different man. Cured his costiveness (most obstinate). Gave him strength and cheerfulness. Checked a disease of the brain that for many years he was sure was in progress. Allowed him to see and visit many patients during the day, and to study into midnight. In fact, added to his life, and took from him years of pain and depression. Now, when it is remembered that our usual diet goes up to two pounds, and often to four, sometimes to six and eight, and that a sick man or woman is no wonder in our community, but is almost the average type of the population, we submit that, in the great light of the cases we have stated, we need here a vast reform. We need, as the good Dr. Mussey says, a more simple diet, and in much less quantity.

“SLINK” AT SWINTON.

“SLINK” is a word used to describe unsound or diseased meat. “Slink” is, in fact, “shoddy” meat, and, like “shoddy,” “slink” is of various qualities and prices. The “slink” trade is an important one, and many men have realised fortunes in it. The cattle plague, whilst it ruined thousands, made hundreds. It will hardly be credited, but it is nevertheless true, that no matter what the disease, or how the animal has met with its death, the carcass is too valuable to be buried, but is converted into food. “Pig’s cheek,” “brawn,” “sausages,” “veal pies,” are all more or less under the influence of “slink.” Manufacturers of these articles exist outside our towns, and it is chiefly in the cooked state that this abominable traffic is carried on. Milk cans are the favourite means of conveying “slink” from place to place. They attract no attention, and are not liable to be inspected. Some may be inclined to discredit our statements, but it is only a month or two ago that a celebrated veal-pie man was fined for having in his possession several putrid calves; and every week some person appears in our police courts for exposing diseased cattle or meat for sale. Last week the Salford magistrates fined one I. Bury £10 and costs, for bringing a diseased heifer to market; for which offence he is now taking the alternative of “three months” in prison.

The Nuisances and Cattle Market Inspectors reduce the live “slink” made in our large towns to a minimum, but they are almost powerless to prevent the importation of dressed and cooked offal. The inhuman dealers in this traffic are well read in the law. They know that an inspector’s power terminates with the city or borough boundary, and just over the line they bid him defiance. In the same way, just let a cart loaded with “slink” cross from Salford to Manchester, or *vice versa*, and the authorities of either cannot follow and seize it. They can only give information to their brother officials. In giving this information much time is lost, and the fox generally manages to get to earth. Again, only officers of health and inspectors of nuisances can legally detain suspicious meat, &c. A policeman, as such, has no right to stop any butcher’s cart or examine any slaughter-house. The law wants extending here; and it ought to be lawful for any policeman or inspector of nuisances to seize any unwholesome meat wherever he may find it. If such were the case, the “slink” factories in the neighbourhood would soon be stamped out. The sickness caused by the fearful amount of bad meat that is sold must be considerable. Fancy eating joints of meat cut from a cow which has died of puerperal fever, consumption, pleuro-pneumonia, abscesses, and hosts of other complaints. We are just learning that consumption is an innocuous complaint, and therefore the fair inference is that it may also be propagated by means of eating meat saturated with tubercle. No disease is so catching or fatal as puerperal fever, and yet we are told on most incontrovertible authority that hardly a cow dies in or after calving, but is dressed and sold for food. We could enter into many more details, but they are so disgusting that we will spare our readers their recital, and only say hardly a parasite exists which cannot be, and is not, propagated in the human frame by means of unsound meat.

The reason we have called attention to this disagreeable subject this week is because only the other day a case occurred at Swinton, which well illustrates the difficulties which surround the seizure of “slink.” A cow was seized at Swinton as unfit for food. The nuisance inspector seized it; and to assist and confirm his judgment, Inspector Bird, of Salford, and Mr. Bostock, veterinary surgeon, were also called to examine the animal. The verdict was an unanimous one against the cow. And so the carcass was destroyed. For giving an honest professional opinion, Mr. Bostock has been favoured with the following specimens of the Swinton Art of Polite Letter Writing:—

“Swinton, August 10th, 69.

“Mr. Bostock, Sir,—I write to inform you that a public meeting of the ratepayers of the Swinton Local Board will be holden at the Bull’s Head on Wednesday evening next, at seven o’clock, to condemn the proceedings and conduct of Bird, Bostock, and Claridge, and the shamefull Robbery which by them was committed last week, and to take further proceedings with respect to the same and to the removal of Claridge.—Yours respy.,

“A RATEPAYER.”

"Your conduct in this affair has met with public condemnation from all Classes of the most respectable Ratepayers."

"If you think your qualification worth defending you had better attend for it will be severely tested by Public Opinion. Against other Respectable gentlemen."

Inspectors Claridge and Bird have also been subject to much personal abuse. The cow in question was very much diseased, lungs and kidneys both being unsound, especially the lungs.

Whether or no the "indignation meeting" was held we do not know, but for the fair fame of the Swinton ratepayers we will hope not. The Swinton folks it seems are "indignant" over many things. They object to their Local Board; in other words they object to being compelled to be less filthy. They cannot understand being "penny wise and pound foolish," and so they were to have an "indignation meeting" against the Local Board. At this meeting we suppose an attempt would be made to drag in the consumptive cow. If we could have ordered matters, all present should have been compelled to sup on this cow; that would have cured them.

Even supposing those indignant Swintonians should prefer eating diseased meat, we cannot allow them to indulge their unnatural propensities. We should have to keep their sick, and we know that health depends in a great measure on good food. "Ab-o'-th'-Yate's" friend's cow hung herself, and Ab profited thereby; but honest Ab would not have iled his children's hair with dripping from a consumptive beast.

We should be happy to contribute our mite towards sending "a ratepayer" to the village school, for he evidently knows nothing of two out of the "three R's;" and in all probability he has no need to know aught of the last one, for the "slink" trade is so profitable a one as to render 'rithmetic superfluous.—*From the Shadow (Manchester).*

MILK DIET.—The general indications for its use are so well laid down by Niemeyer, that I shall quote what he says:—In the selection of suitable diet for consumptive patients, the old rules, derived partly from common experience, agree completely with the views now received in physiology respecting nourishment and renewal of tissue. All the articles of food especially recommended to consumptive patients contain large quantities of fat, or of substances which form it, and proportionately little of protein substances. This selection corresponds with the empirically ascertained fact, that the production of urea, or the conversion of nitrogenous elements, is increased by a large supply of protein substances; while, on the other hand, the conversion and expenditure of the organs and tissues most important to the organism is reduced by an abundant supply of fat and fat-forming articles. Therefore, the freest possible use of milk cannot be too strongly recommended to phthisical patients. But it is entirely superfluous, and indeed erroneous, to remove the casein from the milk and make it be drunk in the shape of whey; this can only be necessary in the rare cases when the stomach bears whey well and milk badly. When I frequently order my patients to drink three times daily a pint of milk warm from the cow, my only object is that the milk should not be robbed of any of its constituents or skimmed before it is drunk." Warm milk is, like other warm fluids, useful in chronic bronchitis. Milk is also an agent of very great value in affections of the stomach and of the intestines. It is easy to see how it is useful when we do not wish to give these organs much work to do; in chronic catarrhs of the stomach, and in perforating ulcer, milk is constantly used with great advantage. In infants, when amylaceous food is given too early, a return to milk is often the appropriate remedy. It is also useful in chronic diarrhoea and dysentery; in the chronic diarrhoea of children its use is familiar; and it is an old and rather neglected remedy in dysentery. If used with care, it is a valuable adjunct in many stages of the disease, and I believe that, if more freely and systematically used, it would be found to be one of the best cures for the obstinate diarrhoeas and other sequelæ of tropical dysentery. Of course the milk must be taken with care, and it must be ascertained whether it is digested or not. If given in too large quantities, it may overload the stomach and increase the diarrhoea. To improve general constitutional states, there is no necessity, as in Dr. Karell's employment of it, for the milk being drunk at precise hours and in precise quantities. The chief object is to drink the milk in such quantities as are digestible. There is no virtue in drinking milk warm from the cow, if you do not like it. It is better to have it previously boiled.

THE PHILOSOPHY OF MARRIAGE.—Few people, in estimating the happiness of a married couple, make due allowance for human imperfection. No two human beings can be brought into the intimate relationship of husband and wife without the occasional development of something discordant. Only perfect, absolutely sinless persons, could live absolutely perfect lives together; and such men and women can never be found in this world; and as in another world there will be no marrying, absolutely perfect marriages can never be realised, either in this world or in that which is to come. But are not the vast majority of married persons quite as happy as an equal number of unmarried ones? Nay, more, are not the great majority of married people as happy in their married state as they would be unmarried? And still more, are they not as happy with each other as they would be with anybody else? By a change of partners, they might get rid of some one or more causes of disturbances between them—some constitutional defects or infirmities, or some disagreeable cherished habits; but they would find in other parties other causes of disturbance quite as serious, though of an entirely different kind; so that, after all, it might be very difficult to say on which side there was the greatest amount of happiness or misery. The fact is that men and women are susceptible of only a given amount of contentment and happiness in any condition of life; and marry whom they will, they can never exceed their capacity for enjoyment. Many people are foolish enough to imagine that marriage is the sovereign cure for all the inquietudes and miseries of life; and when they get married, and yet find their favourite panacea does not work perfectly, they jump to the conclusion that it is because their marriage was not a true one—that it was ill-assorted, and therefore an unhappy one; whereas the only difficulty is, that both husband and wife are human—neither divine nor angelic—and have, like all other human beings, more or less of sinful infirmity about them.

PHYSICAL INFLUENCE OF SUNDAY REST.—"I have practised as a physician between thirty and forty years, and during the early part of my life, as the physician of a public medical institution, I had charge of the poor in one of the most populous districts of London. I have had occasion to observe the effect of the observance and non-observance of the seventh day of rest during that time. I have been in the habit during a great many years of considering the uses of the Sabbath, and of observing its abuses. The abuses are chiefly manifested in labour and dissipation. Its use, medically speaking, is that of a day of rest. As a day of rest I view it as a day of compensation for the inadequate restorative power of the body under continued labour and excitement. A physician always has respect to the preservation of the restorative power, because if this once be lost, his healing office is at an end. A physician is anxious to preserve the balance of circulation as necessary to the restorative power of the body. The ordinary exertions of man run down the circulation every day of his life; and the first general law of nature, by which God prevents man from destroying himself, is the alternating night and day, that repose may succeed action. But although the night apparently equalises the circulation, yet it does not sufficiently restore its balance for the attainment of a long life. Hence, one day in seven, by the bounty of Providence, is thrown in as a day of compensation, to perfect by its repose the animal system. I consider, therefore, that in the bountiful provision of Providence for the preservation of human life, the Sabbatical appointment is not as it has been sometimes theologically viewed, simply a precept, partaking of the nature of a political institution, but that it is to be numbered amongst the natural duties, if the preservation of life be admitted to be a duty, and a premature destruction of it a suicidal act."—J. R. FARRE, M.D.

BREAD WITHOUT GRINDING CORN.—The *Daily News* says, a method has been discovered of making bread without grinding the corn, and a patent has been taken out for the process. It is said that whereas in the process for making bread from flour there is much waste, so that 100lbs. of grain yields only 112lbs. of bread; according to the new process 100lbs. of grain will produce 145 or 150lbs. of bread. The new bread is not only increased in quantity, but is also said to be of better quality. According to the old process much of the gluten was decomposed and lost in the heat of grinding. It is preserved when grinding is unnecessary; and the new mode of fermentation contributes greatly to the whiteness of the bread. Of course we give no opinion on the invention, whether it does or does not proceed on sound principles; or whether, if the principles be sound, their application is practicable.

Correspondence.

VEGETARIAN QUERIES.

To the Editor of the Dietetic Reformer.

Dear Sir,—I shall be glad if you would permit me to ask a few questions on practical matters which may possibly be of service to many others like myself, if some old practised Vegetarians will be at the little trouble to reply to them from their larger experience.

Rice.—How is this to be ground? In what sort of mill—what is its cost—and where obtained? In an ordinary steel flour mill it grinds with great difficulty, and seems in danger of injuring the mill. It could be used in various ways, but only safely if ground at home.

Barley and Rye.—Will these grind in an ordinary steel grinding mill used for corn?

Cocoa.—How may the *nuts* be ground? I have heard of a cocoa mill: Does it work satisfactorily, and to the best advantage? An iron pestle and mortar (the nuts, pestle, and mortar made hot, and then pounded) is said to be the most successful method of preparation, as it is then pasty, and the oil comes out. If so, where can such pestle and mortar be had, and at what cost? I do not consider the boiling of the nib as satisfactory, as well as being a very long process.

Oatmeal.—Is there any simple means of preparing this for domestic use from the oat, at home. Any simple plan of drying and doing the necessary decortication or crushing?

Perhaps these are enough for one number.

AN OUTSIDE FRIEND.

INFANTS' FOOD.

To the Editor of the Dietetic Reformer.

Dear Sir,—I wish to let you know what has recently occurred here, proving the wisdom and correctness of Dr. Sylvester Graham's advice for bringing up infants by hand. An infant, for which the mother had no milk, and which they were attempting to bring up by hand, was shown to me when a few weeks old. It was puny, weak, and sickly. It always cried when an attempt was made to feed it, and could not hold up its head, which hung on one side from weakness. On inquiry, I found that it was fed on gruel, made of *fine* flour, mixed with unboiled milk, and heavily sweetened with brown sugar; and that latterly, to still its peevishness and cause it to sleep, a small quantity of *rum* was added to this. The sugar was given to prevent costiveness which, otherwise, it suffered from. It was acknowledged that the child was getting worse daily. "Put the sugar in your own tea," said I. "Throw the rum out of the door, and send up your daughter to me immediately for a bowl of whole meal wheaten flour, the same as my own bread is made of." This I directed them to make into gruel, according to Graham, thus:—"With a table-spoonful of this meal, and a pint of pure water, make a thin gruel, which should be boiled about fifteen minutes, and then about a pint of new milk fresh from the cow should be added;" the milk being of course unboiled, as before. These directions being followed, and the child being fed accordingly, in a week there was visible improvement, at the same time that red blotches, like those on the face of a drunkard, began to appear on the infant's face. All costiveness had now gone. At the end of six weeks from the commencement of change of diet the flesh of the child was firm and hard, its skin clear and bright, and it was perfectly good-tempered and quiet. Its weight, too, was about double what it was a few weeks before. The red blotches on the child's face, which appeared after the spirit was given up, were to be attributed to its constitution having gained strength by that time from its food sufficient to throw out the poisonous spirit, and they soon went away altogether. The infant is now at least fully as strong as the generality of children of the same age.

Narberth, S. W.

A. B.

DIETETIC SUGGESTIONS INVITED.

To the Editor of the Dietetic Reformer.

Dear Sir,—I should very much like some one to give a few suggestions, rational and reasonable, as to particulars of the daily consumption of food, in kind and quantity, for breakfast, dinner, and evening, adapted for a man and wife living on £200 a-year. I believe a few such suggestions, founded on individual experience, supplied through the medium of the *Dietetic Reformer*, would very much help the cause. I am aware that it may be said that stomachs vary; but let the examples furnished be suited for persons in good health and no idlers. If thou canst give me what I ask, well, if not, can thou give me the name of some one with whom I could make free to write to?

I will give thee my fare for to-day:—*Breakfast*: 5oz. of bread and butter, and two cups of homœopathic cocoa. *Dinner*: Two roasted potatoes; a quarter of a baked rice pudding (made of 1 quart of milk, $\frac{1}{2}$ lb. of rice with a little tapioca, and 1 egg); and finished with a slice of bread and butter. *Teatime*: 6oz. of bread and butter, and two cups of homœopathic cocoa. I make my cocoa with one cup of water and one cup of milk.

I am 84 years of age and my wife 92; we have lived together 60 years; and are both able to do a day's work. I can walk a mile in a quarter of an hour. Have we not much to be thankful for? So I am. J. B.

SUBSTITUTE FOR COD-LIVER OIL.—A correspondent, writing from Edinburgh, says:—"You will be glad to know that *Oleum Arachnis* (Earth-Nut Oil) is an advantageous substitute for cod-liver oil, in many cases, especially for children."

Intelligence, Reports, &c.

AMERICA.

THE American Association for the Advancement of Science held its annual meeting at Salem, Massachusetts, in August last. From the report of the proceedings of the Association, furnished by the correspondent of the *Toronto Daily Globe*, we make the following extract:—

Your correspondent, not possessing the power of ubiquity, had no difficulty in making up his mind to leave the learned speakers in section A (on Mathematics, Physics, and Chemistry) to the regular reporters, and betake himself to the more attractive session of section B, where the interesting subject of that bugbear of pork-eaters, the *Trichina spiralis*, was the first on the list. The subject was introduced by Professor J. Baker Edwards, of Montreal, whose remarks may be briefly related as follows:—

The occurrence, he stated, of two fatal cases of *Trichiniasis* at Hamilton, Ontario, and the successful treatment of several cases at Montreal, had drawn fresh attention to the parasite causing this disease, and accordingly he thought that a short account of its natural history might be interesting. The cysts containing this parasite had been first observed and examined microscopically by Tiedman in 1822; these were found in human muscle after death, and occasioned much speculation as to their real nature. In 1835 they were minutely examined by Mr. James Paget, and described and named by Professor Owen, but for some years no further clue as to their origin was obtained. In 1841 it was found that dogs fed on parts of a badger containing these worms became infested with them in their muscles; but it remained for Zenker in 1860 to show that the human body becomes affected by these creatures after eating pork containing them. Since that time thousands of deaths have been traced to this cause, which had previously been attributed to various other diseases. *Trichiniasis* was now fully established as one of the "ills that flesh is heir to." In several hospital examinations of human bodies after death from various causes, from 2 to 3 per cent of adults were found to contain old encrusted capsules containing these parasites, showing that the disease existed at some previous period. In Chicago a medical commission found 2 per cent of the

pork offered for sale affected in this manner. Thus it may be inferred that the disease occurred much more frequently than had previously been suspected, but that it was only in exceptional cases that it caused fatal or even serious results. The Professor then proceeded to give an account of a case that occurred in Montreal last March, and which, being speedily diagnosed of a slight nature, was successfully treated. His description and remarks are of so much general interest and value, that they may very well be reported here, though at the risk of making this letter unduly long:—

“On Wednesday, the 24th of March, a family in a boarding-house partook of some hastily fried ham. Within an hour afterwards two of the adults felt nauseated, and had some pain in the stomach. One took a large dose of brandy, and vomited his dinner; the other felt only abdominal pain, spasms, and faintness. He returned from his work and went to bed. During the night his wife and wife's mother felt ill, and suffered from pains in the bowels, together with great feverishness and thirst. During the following day, five other persons, who had partaken of the same meal, suffered more or less from similar symptoms, and in the evening of Thursday called in a physician, who, after careful enquiry, diagnosed Trichiniasis, and called in a second opinion on the case. On Good Friday a slice of ham was submitted for microscopic examination, in which Professor Edwards discovered, after some hours' investigation, several characteristic specimens of *Trichina spiralis*. By Monday morning, with the assistance of his friend, Mr. Ritchie, he had found several groups of *Trichina*, both in the free state and partially, as well as fully, encysted. These were during the same day shown to a considerable number of medical friends.

“It was evident that the disease was recent in the young pig from which the ham was taken, and that, being in the free and semi-encysted condition, the worms were in a condition to be aroused into action and activity in a much shorter time than had they been fully and calcareously encysted. According to Virchow and Zenker, the period of incubation of the cyst in the stomach is from six to eight days. This had been erroneously interpreted to mean that such a period must elapse before any marked symptoms can be recognised. Such a period of time, however, is meant to be inclusive of the reproducing power of each individual, from whose body successive broods of young, numbering from 100 to 200, are discharged. Dr. T. S. Cobbold had found a period of sixty-nine hours amply sufficient for the development of the young muscle flesh worms of the human subject into the sexually mature adult *Trichina* of the dog. If all the worms were calcareously encysted a delay of from three to six days might be expected before intestinal irritation was a marked symptom. But in cases where the worms were young and free in the muscle, development might take place in a few hours, and rapid multiplication take place before other encysted worms were released from their capsules.

“Thus a succession of fresh irritations to the muscular and nervous system might be expected from the first few hours to a period of eight or ten weeks. In the fatal cases examined in Chicago and Hamilton, no single case of encysted trichina was found in the flesh, but in the Montreal cases one or two distinct and complete cysts were extracted from the man's leg. This was eight weeks after eating the pork, and when the symptoms had somewhat abated, but considerable pain still felt in the muscles. The great shock to the system, which frequently terminates fatally, appears to result from excessive generation of the worms at any one period; thus young and healthy persons are frequently killed sooner than older and more feeble persons, the reason being that in the former case probably more food is eaten, digestion is more rapid, nausea more readily overcome by active exertion, and the breeding of the worms becomes excessive and continuous. In the Hamilton cases the young woman died in three weeks, whilst her mother survived six weeks after eating the fatal repast.

“In 1866 some valuable experiments were conducted, in reference to the propagation of these worms, by Dr. T. Spencer Cobbold, whose researches on Cestoid Entozoa place him at the head of English authorities on such subjects. After feeding animals with trichinous food, seven experiments on birds all proved negative. Three sheep, two dogs, one pig, and one mouse gave also negative results. Nine cases were successful, viz., four dogs, two cats, one pig, one guinea pig, and one hedgehog. While we might, therefore, conclude that birds and herbivorous mammals were very unlikely subjects for infection by this means, it was also found

that other animals, as the dog and pig for instance, might partake of the food, and yet escape infection. This helped to explain the recorded facts, that large parties have eaten of trichinous food in company, and some have been killed, others have suffered slightly, and again some escaped altogether.

"Moreover, in the human objects examined *post mortem*, where the disease had not proved fatal, in some cases the cysts were by no means numerous, whilst in others they had been estimated at from forty to one hundred millions. The excessive alarm which was apt to seize the public mind by the discovery of a case here and there was not, therefore, justified by the facts when properly understood. At the same time, whatever means could be adopted by the public authorities to prevent its becoming a familiar disease in our new dominion, should be forthwith adopted."

At the close of this interesting paper, which was listened to with great attention, Professor Agassiz stated that he thought parasites existed in all kinds of meat, and that everybody who eats fish eats hundreds of them; hence only one of two alternatives could be adopted to escape injury—either to stop eating flesh and fish, or to have these articles of food well cooked. With this high authority the reader may rest assured that, however unpleasant the idea may be, the *Trichina Spiralis* is quite harmless as an article of food, provided only it be well roasted or boiled.

The next paper, by Mr. Meehan, was of a botanical character, and of no particular general interest. He was followed by Professor B. W. Hawkins, of New York, who made some remarks on "Visual Education." After referring to the inability of the majority of mothers to answer satisfactorily the questions constantly asked by intelligent children, he advised the education of the powers of observation, rather than those of memory, and recommended the establishment of museums in connection with the public parks of large cities, so that healthy exercise and amusement might be combined with instruction. Such institutions, if properly conducted, would, he thought, do more good than reformatory establishments, and would also enable boys to remain longer under the good influence of their mothers than was the case with the present imperfect system. Professor Agassiz followed by expressing his belief that we should, ere long, see a great change in our educational system, and that the basis of it would be the contemplation of the works of nature, and no longer the study of languages, the study of the human mind, or the process of mathematical reasoning. Although these must form a part of liberal education, they should come after the organs had been trained in seeing through observation, and the mind taught to argue by comparing observations; that was the first great step in education, and all that followed in scholarship should come afterwards.

Reviews and Notices of Books.

Proceedings of the London Co-operative Congress, 1869. Price 1s. London: F. Pitman, 20, Paternoster Row, E. C.

THIS large and neat pamphlet of 118 pages, is edited by J. M. Ludlow, and contains the proceedings of the Co-operative Congress held in London, at the Theatre of the Society of Arts, on the 1st, 2nd, and 3rd of June, 1869. There are also appendices containing statistical details respecting societies represented at the Congress; papers by Mr. Malcolm Macleod and Mr. James Samuelson; and other information. Those who take interest in this important movement will be greatly interested with this report of Proceedings of the London Congress.

The Anti-Vaccinator. Edited by HENRY PITMAN, Manchester. London: F. Pitman, 20, Paternoster Row. Manchester: John Heywood. Price 1d.

THIS is a weekly organ of the new movement against compulsory vaccination. We have before us the first six numbers, and find them replete with facts, arguments, and reports of progress. No. 6 opens with an able and spirited letter from Professor Newman on "Vaccination viewed Politically," which will be found in another page of the present number of the *Dietetic Reformer*. The movement seems to be making headway; and we hope will soon result in forcing the question upon Parliament for a most sifting inquiry leading to a repeal of the obnoxious Act.

Human Nature. London: J. Burns. Monthly.

A publication, thoroughgoing and progressive on dietary questions, and equally so in philosophy and religion. It includes spiritualism, on which we have nothing to say in these pages.

Poetry.

AN AUTUMN RAMBLE.

One autumn afternoon, my friend and I
 Escaped from city smoke and ceaseless roar
 To breathe, along with nature's breath, somewhat
 Of Nature's loving, beauteous tenderness.
 Along the river's meadowy marge we strayed
 By cot and farm to where its banks rise high,
 With overhanging trees, which fain would dip
 Their thirsty branches far below into
 The rippling, glistening wave. And as we went
 We spoke of man, self doomed to endless toil
 In mine, and mart, and mill, with little time
 (And less desire) for art or poesy ;
 But rather bent at best on wanton play,
 And oft engulfed in drunken orgies wild
 And Cyprian vice. Anon we turn aside
 Through clough and park, by many an ashen bush
 In coral berries clad, to where 'mid groves
 And gardens stands serene the stately hall.
 The fuchsias hang in showers, and ripening fruit
 Makes glad the eye and scents the whispering gale ;
 While many a marble vase and antique gem
 Recalls the classic memories of the past.
 In winding lanes we meet the lowing kine
 Which stand and gaze with gentle, wistful orbs,
 Nor dream that we have no intent to wield
 The butcher's axe to feed a pampered taste.
 Returning by the stream as fast the sun
 Sinks down 'mid clouds and woods of transient gold,
 Our lengthening shadows stretch across the path,
 And lend a sombre tint to brook, and hedge,
 And fluttering heaps of rustling autumn leaves.
 In yonder field, new reaped, a startled hare,
 Pursued by foes (not dogs, but men), makes way
 Along the hedge straight for the river's brink,
 Nor stays to look behind, but plunges in,
 And swims beneath the bridge ; then, panting, rests
 Below the pier upon a stony heap—
 Appearing one itself—until its foes
 Approach as if a murderer they pursued.
 The one a farmer, fork in hand, goes o'er
 The bridge, and waits the foe on th' other side ;
 His fellow stays on this—a collier he,
 Returning homeward, safety lamp in hand.
 The science which had given the lamp had failed
 To give him light. He seized a stone, and hurled
 It at the terror-stricken thing, which sprang
 Once more, though sorely bruised, into the stream,
 And sank, at length, despairing and quite spent.
 The farmer went to gather golden grain,
 Just reaped from gentle Nature's bounteous lap ;
 The collier went his way to tell the tale
 To boon companions ; we pursued our path
 With one great question weighing down our hearts—
 Why man to man and brute should be so vile,
 While Nature's face wears still a fairy smile.

FACTS FOR SMOKERS.—A fact for the Anti-Tobacco Association is brought out in a Parliamentary return just issued. The consumption of tobacco in this country is enormously increasing. Over 41,000,000 pounds' weight has been consumed in the United Kingdom in a single year, without taking into account the illicit trade. This 1 lb. 5½ oz. per head of population is yearly consumed, as compared with only 13½ oz. a quarter of a century ago. Now, we shall not be so ungenerous as to ascribe this great increase in the quantity of tobacco consumed to the vicious habits with which some are wont to credit the "girls of the period." But it may be as well that our fair smokers should be made aware of a fact or two concerning the "fragrant weed." In the laboratory of the Excise Department certain tests are occasionally made as to the genuineness of the tobacco sold. Of 118 samples, 88 were found to be adulterated, and 45 of these contained liquorice ranging in amount from 1 to 10 per cent; four contained liquorice and sugar, varying from 2 to 10 per cent. Among the other adulterants were common salt, aniseed, starch, brown paper, and an excessive amount of sand. A few instances have again occurred of "smoking mixture" having been found adulterated with sweetened cavendish. Of course, the Excise authorities do what they can to check adulteration. Last year they made a raid upon six Irish manufacturers who supplied English dealers with Irish roll tobacco coated with starch, which had been coloured to resemble tobacco. Some 28,000 lb. of the adulterated tobacco were seized in Ireland, and 4,000 lb. in England; and the penalties and forfeitures amounted to £4,000. Despite all the precautions, however, the revenue is extensively defrauded, while the people are poisoned by these adulterations, which will never be stopped until the act is constituted a criminal offence.

THE RESURRECTION PLANT.—This is one of the latest curiosities in the plant line. We obtained one of Mr. Vick, of Rochester, last spring, and it then resembled a bunch, four or five inches in diameter, of curled-up shoots of young cedar, with a small cluster of thread-like roots depending from the bottom. Placing it in a saucer of water, the bunch unrolled in a few hours, spreading out quite flat, and presented somewhat the appearance of a heavy patch of moss. In this state it remained two or three weeks. If the supply of moisture failed for a time, the plant gave warning by assuming its regular ball-like form. At the end of that time we transplanted it to the ground, and it looked fine and green under the influence of genial showers. But the weather grew dry, and the resurrection plant rolled itself into a ball and rolled away before the wind, the roots not having much grasp on the soil. It lay in the sun on the ground for a month, when we gave it to a friend, who placed it in a saucer of water, and lo, it spread out its arms again and showed the green colour of vegetable life. An American paper thus speaks of this singular plant: "These plants are brought from the southern parts of Mexico. During the rainy season they flourish luxuriantly, but when the dry weather and hot sun scorch the earth, they, too, dry and curl up, and blow about at the mercy of the wind. To all appearances they are as dead as the 'brown and sere leaf,' but as soon as the rain comes again, the roots suck up the water, the leaves unfold, and assume a beautiful emerald green appearance. No matter where the plant may be, on a rock, on a tree, or a house-top, wherever the winds have blown it, there it rests, and being a true temperance plant, it only asks for water, and at once bursts into new life. Having purchased one of these tufts, and placed it in a soup plate filled with water, the reader will be surprised to see it gradually unfold and take on a deep green. The leaves are arranged spirally, and altogether the resurrection plant is the latest curiosity."—*Rural New Yorker*.

To Readers and Correspondents.

We are indebted to some German friend for copies of "*Vereins-Blatt fur Freunde der naturalischen Lebensweise (Vegetariener.)*"

EMIL WEILSHAUSER.—See second page of our cover.

Subscriptions received since our last issue:—

July 9.	C. Hunter, D. R.	2 0	Sep. 25.	R. Templeton	10 0	Oct. 1.	A. Erlebach	10 0
" 20.	Charles Hart	2 6	" 29.	Thos. Ashley	2 6	" 1.	S. Stocks	5 0
Aug. 12.	J. Hull	2 0	Oct. 1.	J. H. Sweetnam	2 6	<i>For Tracts:</i>		
" 22.	Robert Palmer	10 0	" 1.	J. Ashmore	2 6	Sep. 11.	J. Robertson	0 6
" 23.	John Kershaw	2 6	" 1.	A. Bayle	2 6	" 29.	W. Lawson	8 0
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