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THE CANADA TEMPERANCE ADVOCATE,

DEVOTED TO

TEMPERANCE, EDUCATION, AGRICULTURE AND NEWS.

Vol. X.

DECEMBER 2, 1844.

No. 23.

The Favourite Child.

(Continued from 340.)

Mr. Ainsworth had the reputation of being an extremely good-natured man. In fact, he really was good natured; but it was only in proportion with the extent to which his own ends were facilitated in their accomplishment. Had these been more subject to failure, his reputation on the score of temper might have suffered some abatement; but the very equanimity of his deportment, the smooth, easy, and yet determined manner in which he transacted business, gave him a sort of mastery over more impetuous and turbulent spirits, which he was not slow to turn to his own account.

Every one has his besetting sin. Mr. Ainsworth's was the love of money—the love of gaining and keeping money, and in addition to this, of having it known that he possessed it. The accomplishment of this last object, however, involved him in perpetual contradictions to his natural will. Yet it would little have answered his purpose to be rich, had no one known that he was so; and he was consequently under the painful necessity of publishing this fact through the medium of good dinners, elaborately got up, and ostentatious displays of occasional hospitality, which he felt all the while strongly disposed to think cost him more than they were really worth. On all other occasions, his expenditure, and that of his family, was limited to the strictest economy. "Eat nothing, wear nothing, and buy nothing, that you can possibly do without," was the ruling maxim of his life; "and you will be gainers by it in the end," was the no less frequent conclusion to this sage advice. Had he at the same time proposed to his family a motive worthy of their efforts, all might have tended to their real good. He had himself, however, no motive beyond that of accumulating wealth, and therefore he knew of none to propose to his children, higher, or more noble, than that of being "gainers in the end."

Accustomed in early life to the habits of unresisting obedience, active, industrious, and somewhat like her father in the bias of her mind, Miss Ainsworth had been easily trained up to fall in with all such domestic arrangements as were most conducive to the one great end. On the death of her mother, which took place when she was little more than sixteen, she had been intrusted with the keys of office, and ever afterwards had found her element in what is called domestic management.

The reputation of Mr. Ainsworth's daughters, for their skill and industry in this department, was certainly well deserved. It was their father's highest praise, that they saved him the expense of at least one servant. They had recipes, and cheap methods, for making every thing that could be eaten, and doing every thing that could be done. Nothing therefore, was ever purchased in its manufactured state, which their hands could turn to proper use. For the raw material only, Mr. Ainsworth paid his money, and he had the advantage of their labour gratis. In proportion to this labour, was the care with which every thing they made was preserved for its appointed purpose; and, like the servants with whom they chiefly associated, they learned to believe the great end of domestic economy was to make a better display than their neighbors, on those grand occasions when their father invited his friends.

The bride, of course, had been witness to many of these displays soon after her marriage, and on these happy days, when guests polite and flattering had pressed her to take what was most agreeable, she had been in high good humour—even almost gay. It was when all was put away again that discomfort and desolation seemed to stare her in the face. In vain she endeavoured to cope with these hitherto unknown enemies. The ingenuity of her maid threw some lights upon the scene.

Betsy had at last found an opening for the relief of her mind, in constant tale-bearing from the kitchen. She had never seen such doings in all her life—"every thing locked up—perfect star-

vation—the fire put out as soon as the cooking was done—salt butter, and sour beer! It might do for those who had been used to nothing better, but—"and such a concentration of contempt and indignation was embodied in this but, that the word seemed scarcely large enough to bear its own burden.

At the conclusion of one of these eloquent declamations, a plan was devised between the mistress and the maid to have their own little provision store—just what was "absolutely necessary—what health, in short, required." Nor was Betsy slow in suggesting expedients for carrying this plan into effect. Their new order of things, however, was a little more expensive than either had expected, and for the remainder of the week they were decidedly short of money. The bride now found that her husband's allowance was not likely to prove sufficient; and how to remedy this inconvenience was beyond even Betsy's powers of invention to devise.

Isabel had hitherto been a stranger to premeditated deception. She had feared no one, and therefore had nothing to conceal. She could scarcely be said to fear any one now, yet there was a sort of obstinate method in the family, which defied all innovation; and though her request for any particular indulgence might not have been denied, it would have given rise to so much amazement, so much reasoning on its cause, and calculation as to its consequence, that something even more absolute than direct denial seemed to be placed in the way of her gratification. And thus it was that she became, under the teaching of her maid, an apt scholar in the first practice of deception.

It so happened that the Misses Ainsworth, so clever in every branch of economy, wanted either time or talent to make their own dresses, and they consequently employed a young woman, who was so poor that she worked for them on the lowest possible terms. They were accustomed to say of her, "it was quite a charity to employ her, she worked for them so cheaply."

Isabel had been favourably struck with the appearance of this person, and, thinking she might aid in the accomplishment of one of her own little schemes, asked her one day for her address.

Maria for that was her name, blushed deeply, and evaded the question. Isabel asked her again, when she turned to Betsy and said, "if your maid ma'am would like to call at my lodgings, I live at No. 3,——street, on the third story."

Isabel might easily have read in the countenance and manner of the girl, that this communication was made with great pain; but she was just then too intent upon her own affairs; and, bidding her maid write down the address, thought no more about the matter.

The important scheme which at that moment filled her mind—was the purchase of a dress which had pleased her fancy, and the possibility of having it made up by this young woman, and brought secretly to the house, without her husband or her daughters ever knowing that it had not been a part of her bridal equipment. Some weeks however, elapsed before this plan could be carried into effect, owing to the demand upon her purse from other quarters, and during that time she heard nothing of the poor dress-maker.

It was one fine morning, after Mr. Ainsworth had set off on his usual walk to the city—a mode of passing to and fro which he adopted purely for the preservation of his health—that Isabel and her maid sallied forth to visit some of the most fashionable shops in town. The identical fabric was at last found, but not without a little mortification experienced by both, to discover that it was at least double the price which had been anticipated—on the part of the mistress, because her weekly allowance was falling more and more short of her desires; and on the part of the maid, because this deficiency had lately been supplied in the form of loans from her own purse, to an extent which she began to look upon as rather serious, considering the situation of her mistress.

A new dress, however was in her estimation so great a treasure, and afforded so cheering a hope of some former one being

displaced, and converted to her own use, that she felt glad she had not, according to her first intention, purposely left her money at home for that morning.

With the dearly-bought treasure, then, they proceeded in search of the street to which Maria had directed them, and which, but for their ignorance of London, they would scarcely have had the resolution to enter. The house too, was so little inviting, that they retreated from the door to look for some other No. 3, before they had the courage to knock. They did knock, however, at last, and it seemed to them, as the sound jarred upon their ears, that every inhabitant of that wretched street was looking upon them. A little dirty girl came to the door, and when they told her they wanted the dressmaker who lived on the third story, she tripped up stairs before them, evidently proud of pointing out the way to such illustrious guests.

The door of the third story was closed, and they knocked twice before a female voice answered from within, "Come in." They did so, and a scene presented itself which might have driven from a harder heart than Isabel's all satisfaction in having purchased an unnecessary dress. The miserable occupant of that dark chamber—the cheap dressmaker, whose daily and often nightly labour supplied her only means of subsistence, had been ill for three weeks; so ill, that bundles of work, untouched, lay heaped upon a table by the small window, which looked out upon an interminable range of black chimneys and tiles. She sat in a low chair, evidently too feeble to rise, beside a fire-place which contained only a few cinders. Her bed, if such it might be called, was in disorder for she had no strength to make it; and there were traces of recent tumult and confusion in the room, which her helpless situation was altogether insufficient to account for. On discovering who were her visitors, a deep crimson spread itself over her face; and, such was her weakness, confusion, and distress, that drops of perspiration were actually forced out upon her forehead.

With the kindness which, in a latent and inactive form, really belonged to her character, Isabel began to question the poor invalid as to the nature of her illness; when, as the tones of an unknown voice had roused some slumbering demon in the adjoining apartment, strange sounds, as horrible as they were strange to ears refined, again suffused the sufferer's face with crimson; and looking round, she saw the door forced open by a spectacle, which however familiar it might be to her, was worse than appalling to her guests.

It was the Mother of Maria—an aged woman, who for many years had been the victim of intemperance, and whose constant cravings drained away the produce of her daughter's industry. In health and strength, Maria had been able to conceal the wages of her labour from this woman's rapacity; but since her illness, every corner of the room had been searched, and even her own dress had that very morning been violently torn, to obtain the last shilling she possessed.

Attracted on the one hand by a strong sense of sympathy, repelled on the other by disgust and horror, Isabel remained as if rooted to the spot. She was unwilling to leave that helpless girl with her sufferings unrelieved; and yet there stood that frightful woman, grinning with distorted laughter, and beckoning to her as if to share the horrors of her den.

The mother of the young dressmaker had just sense enough to perceive the character of her daughter's guests, and consequently to make her accustomed demand for money, which, being promptly granted, partly through fear, and partly through disgust, she retreated into the inner apartment, leaving her daughter more at liberty to pursue her melancholy story. It was a short and simple one.

"Was your mother always addicted to these habits?" asked Isabel.

"Oh! no," replied Maria; "she was once the best of mothers; and as I grew up, we would have been able to do very well, but she married again, and her husband was a hard man, and stunted her of many things she had been used to. I believe he meant well, but they got to harsh words one against another, and so my mother took to drinking to drive away her grief, and then he left her. Indeed, no man could live with us, as we live now. My mother has had nothing for the last three days but gin; and I assure you ma'am, I have not a penny, nor a morsel of bread in the house. I had been thinking this morning, that if nobody came to help me, I should hardly live to see another day; and now I thank God for sending you, for I am sure there is goodness in your face."

In what way can I help you most?" said Isabel.

Why ma'am, if I might make so bold—you see those heaps

of work—it is a great thing to ask; but if I could hire a person for a week to do it for me, I should just keep my custom and all would be well."

Isabel again asked Betsy for her purse, but was interrupted by the young woman intreating that she would not leave the money with her. "I am not strong enough to keep it yet," said she, looking round with a suspicious glance at the door. "She would get it all from me; but if your maid would just step in at No. 5, there is a neighbour there who would take the work, and you could settle with her about the payment.

"But you have nothing to eat," said Isabel, "and you must be starving."

"I have no appetite," replied the poor girl; "yet if you would be so good as to leave a shilling with this woman and ask her to come and make me a cup of tea, it would be the greatest kindness."

Gladly did Isabel comply with this request. Not so her maid; for though Betsy considered her money well lent in the purchase of a handsome dress, she was far from being satisfied with her lady's having undertaken, at her expense, the relief of a case, as disgraceful in Betsy's opinion as it seemed likely to be interminable in its demands. It was on this occasion, therefore, that for the first time in her life, she began to evince openly a spirit of discontent towards her mistress, and of opposition to her wishes. A few words of impertinence which she let fall, at once awakened Isabel's surprise and indignation; but the sudden recollection that she could not, if she would, dismiss this woman from her service—that she was, in a manner, completely in her power—brought with it a violent revulsion of the proud feeling which had rushed to her heart, and sinking into a chair as soon as she regained her own apartment, she covered her face with both her hands, and gave way to a burst of agony and shame.

How many tears had Isabel lately shed unnoticed by any human being! How often had her maid—her once kind and attentive maid—passed in and out, and found her weeping, and spoken not one word of soothing! How often had her husband left her locked in her dressing-room, and gone forth on his own avocations, believing her to be one of the happiest of women! For Mr. Answorth reasoned thus: "All women wish to be married—consequently all are happy when they are married;" and for certain reasons, perhaps, best understood by himself, he thought his wife had a good right to be happier than most. Indeed, Mr. Answorth was altogether well satisfied with the matrimonial bargain he had made. His wife had money, she was of respectable parentage, looked well at the head of his table, and moreover was extremely quiet. He never had liked talking women. Women who had opinions, almost always had wishes—and then they got to reasoning about the expediency of laying out money. He eschewed such women they were great evils to society, and wasted men's money.

Poor Isabel! How little did her husband know, while pursuing these reflections on his daily walks to the city, of the hidden fire that burned within the heart he deemed so quiet—so contented with its lot.

Alarmed beyond measure at the first symptoms of rebellion in her maid, though in themselves extremely slight, and not soon repeated, Isabel stooped, as all most stoop who are determined to do wrong, to purchase the compliance she could not otherwise command; and this she easily accomplished by gifts from her own store of superfluous treasures. Still however, the impression on her mind was the same and that she had no longer a friend in her maid; and though appearances on the part of the quondam favourite became more favourable in proportion to the benefits she received, there was something different in her manner—something less respectful and submissive—which induced her mistress to contemplate the expediency of finding a confidant elsewhere. Her choice fell upon the young dressmaker, and for this purpose she ventured out in search of her obscure dwelling, unaccompanied by any witness.

Maria had now recovered her accustomed health. Her apartment, kept in order by her own industrious hand, no longer wore the aspect of wretchedness it had once presented; and her mother, recently recovered from a long fit of intoxication, was sitting, dejected and feeble, in a low chair beside the fire.

Isabel had no definite reason to allege for making this visit. It was therefore received as one of pure kindness, and the gratitude of the poor girl was proportioned to the rarity with which such visits were made to her.

Isabel was by no means at ease with her own conscience; she was therefore more susceptible of shame, at having so pure a mo-

tive unjustly attributed to her conduct. Under these circumstances, she did what has often been done before, to relieve the mind from similar uneasiness—she suddenly conceived the idea of doing good, and she imagined to herself the pleasure of doing it to this family on a more extensive scale than mere charity could effect. It is true, she had scarcely ever attempted to do good in her whole life before, because of the trouble required to keep it up; but the recollection of the very little she had done, was connected with a sense of pleasure; and now that pleasure was to her of such rare occurrence, now that so few people loved her—now that life was becoming altogether so dark and desolate—perhaps, if she was to begin to do good, she might feel more comfortable. Besides all this, something whispered in the secret of her heart, that perhaps it might cover a multitude of sins; for, in addition to those of which she knew herself to be guilty at that time she was seriously contemplating the committal of more. Not that she considered herself much in fault; she rather thought as many others have done, that her inclinations were on the side of virtue, but that the luckless circumstances in which she was placed, and the influence of those around her, were actually forcing her into a course of conduct which it was impossible to avoid; nor had she yet begun to think so deeply as to understand, that by allowing this to be the habitual and prevailing feeling of her mind, she was in reality accusing God of injustice, and living in a state of constant blasphemy against the purity and the benevolence of his designs.

A sudden impulse to do good has, however, always something pleasant and cheering in it, and Isabel became more than usually animated as she applied herself to the task of talking with the mother of Maria on the subject of her besetting sin—a task which she undertook with the hope that she might be the means of restoring this lost creature to respectability and comfort.

The poor woman was on this occasion in that low stage of her disease when tears flow abundantly, and often without any definite cause; and Isabel, in her new character of admittance, was encouraged by these tears to proceed at greater length than she had previously intended. The daughter listened attentively—for the poor and the solitary like to have their sorrows entered into with feeling, and altogether the hour which had passed appeared to have been a very profitable one, when, on Isabel's rising to depart, the poor woman raised her head and began, in her turn to speak.

"All that you have said," she observed, "is very well. It is all very true and good, and I could have said as much myself, only in different words; but it is all worth nothing—I tell you it has no more to do with my case, than tolling the church-bell has to do with the soul that has just gone to judgment. Look here," she continued, beckoning to Isabel to be seated, "you have had your say—it is fit I should have mine now. The case is just this: you talk to me as if I could help it—as if I could stop, and be as I once was again. You can help it, I dare say, and I could help it once; but the time is past, and it would be of no more use for me to make the attempt now, than it would be to try to lift the burdens I carried in my youth. I tell you this plainly, because it is a waste of your fine words, to come here and talk to me. You know nothing about my situation, or what I know, and what I suffer. You have been but a short time married. I was happy for six months; your days of trouble may come, as mine did; and then let us see whether you will deny yourself the wine that warms your heart, and makes you care for nobody. No, no; even now, I dare say, you drink your glass every day—perhaps two—and makes yourself comfortable, though I have a kind husband, and health, and wealth, and I have nothing."

Poor Maria listened to this outbreak of her mother's feeling with a degree of alarm and chagrin, scarcely surpassed by that of the individual to whom this unexpected address had been directed; and following her guest, who prepared to make a speedy exit, to the door, she made the best apology for her mother which the exigency of the moment allowed by saying that her troubles, and the habits she had given way to, had turned her head.

"Don't mind her, poor thing," she added; when she talks in this way, she does not mean to be impertinent; and oh! ma'am, if you could do her any good, what a blessing it would be!"

It was some little consolation to Isabel to find that her endeavours to do good had at least been appreciated in one quarter, but still her disappointment was proportioned to the extraordinary degree of effort she had that morning made, to do evil, as well as good to serve herself as well as to serve another. Both these objects had been defeated, and she could only wait for the con-

pletion of her own purpose until an opportunity should occur of conversing with the young dressmaker alone.

This opportunity occurred again and again, and still the resolution of Isabel failed her; for there was something in Maria's honest care-worn countenance that seemed to repel every idea of bringing her over to a bad cause. At last, however, she gained courage to make the proposal, that this poor girl should be her secret agent in bringing to the house what she could not openly obtain.

Maria received the proposal in silence; she seemed unable to answer; a deep blush spread all over her face, and then faded away to ashy paleness. She was poor, and Isabel had ministered to her necessities; she was unhappy, and her benefactress had shown her more kindness than any other human being since the days of her childhood; how could she refuse her so small a service in return? Upon what plea could she refuse it, except such as would convey a direct insult?

All these thoughts and feelings rushed simultaneously through the mind of the poor girl as she stood speechless and trembling, with her eyes fixed on the ground. At last she spoke the simple truth, and her courage seemed to rise with the effort it cost her: "I dare not, ma'am," she said; "indeed, I dare not; it was the way we began with my poor mother. Many's the time I have gone out for her, early and late, into places where it was a shame for a girl like me to be seen; but I was young then, and little knew the danger of what I did; I know it now, however—nobody knows it better—and the sin would lie at my door, if evil should ever come of it."

"Then you compare me to your mother, I suppose," said Isabel, in no very conciliating tone.

"Oh! no, ma'am," said Maria, "no indeed; far be it from me to compare a lady like you, to my poor mother; but many great sins come from small beginnings, and, as I said before, it is for those who know what such beginnings are, to keep their hands clean from meddling in them."

"Then you may go away," said Isabel; "I have no more occasion for you to-day: it is the only thing I ever asked of you, and I have no one else to ask now."

Maria turned away. Tears were streaming from her eyes, but no relenting voice recalled her; and, with downcast look and heavy heart, she passed along unheeded through the busy streets which led to her own miserable dwelling.

Galled and wounded by this refusal, and the reproach it naturally implied, Isabel was now thrown entirely upon her own resources for the means of obtaining what she had been accustomed to consider as the necessaries of life. Like all women whose habits of indulgence resemble hers, she was subject to a variety of nervous affections, as well as to some serious ailments—to hysterical fits, to indigestion, and to occasional faintness; for the prevention or the cure of all which she was accustomed to make use of strong stimulants, frequently applied.

Symptoms of these disorders had been exhibited soon after her entrance into Mr. Ainsworth's family; but having met with little encouragement, they had been subsequently almost entirely confined, to the knowledge of Betsy alone. Now, however, when the circumstances of her case had become more serious, Isabel either was, or believed herself to be, more severely indisposed. Amongst other distressing symptoms, she was seized with violent spasms, and Miss Ainsworth was applied to for brandy, or, indeed, for any kind of spirit; and this prudent person, after expressing her surprise that Mrs. Ainsworth should have recourse to any thing so potent and inflammatory, went so far in compliance with the demand, the third time it was made, as actually to take up stairs with her own hand, a wine-glass full of warm water, slightly discoloured by a few drops of brandy—"It was enough," Betsy said, "to make one ill to look at it."

(To be Continued.)

Intemperance the Idolatry of Britain.

BY W. R. BAKER ESQ.

(Continued from page 323.)

IV.—OUR IDOLATRY IS DISTINGUISHED BY ITS COSTLY SACRIFICES.

It was the remark of Solomon, that "The way of transgressors is hard;" and if we may judge from the sacrifices which intemperance demands, the history of this sin is a striking illustration of the truth of the assertion.

The idolater of ancient Greece, or Rome, or even the worshipper of the Idol Juggernaut, might be a liberal and devoted supporter of his faith, and yet retain a very high degree of temporal prosperity and enjoyment. He might still possess a healthy body, and a vigorous mind. He might be an object of love and veneration to those around him, and might prosper in all his undertakings; but the devotee of strong drink makes a voluntary surrender of everything, essential to his happiness, to the god of his idolatry.

1. *He sacrifices the Health of both his Body and Mind.*

The intemperate man lives in the constant violation of the laws of his nature, and may, therefore, as rationally expect to enjoy health and strength, as to be free from harm, should he thrust his hand into boiling oil, or hurl himself from the top of a lofty precipice.

The very highest medical authorities might be quoted to prove, that the habitual use of any kind of intoxicating stimulant, however moderately employed, unless required as a medicine, is injurious to human health*—in other words, that the moderate drinking of intoxicating liquor, as a beverage, is no better than moderate intemperance, and must be classed with the practice of opium eating, and sucking tobacco-juice. Ardent spirit has long ceased to have many advocates, except among the most ignorant, or the most interested, and those who unhappily, have become slaves to the use of it; but, as a state of intoxication itself, is a fearful condition of physical discord, to suppose that the intoxicating principle can be taken, in any form without injury, by those in health, seems to involve an absurdity too obvious to need exposure.

In proportion to the health and strength of any constitution, will, of course, be its power to resist the deleterious influence of intoxicating stimulants, and, consequently, the longer it will be in breaking down under the habitual use of them; but it is impossible to conceive, that a state of unnatural excitement, can be produced daily, or two, or three times a day, in any measure, without producing, first, functional derangement, then, organic disease, and, finally premature mortality.

But, admitting it to be possible, for a certain quantity of the less powerful alcoholic liquors, such as weak ale, or the pure wines of vinous countries, to be used, as beverages, without deranging, and enfeebling the constitution of any man, still, it cannot be denied, that excess, in the use of even these is productive of disease and suffering.

Dr. Gordon, physician to the London Hospital, tells us that he has discovered, "by careful observation, on some thousands of cases, that the diseases, distinctly referable to ardent spirits alone, amount to 76 cases out of the 100," what then must be the amount of health destroyed by the fifty million pounds' worth of intoxicating liquors, annually consumed by Great Britain and Ireland, and of which the far greater part, by whatever names they may be designated, must be classed with those strong drinks, whose injurious tendency cannot be mistaken; and whose nature and effects have been so described, by the pen of inspiration,† as to render the use of them, for purposes of self-indulgence, an act of the most flagrant criminality.

When attending meetings held for promoting the cause of missions to the heathen, the reader, has, probably, often heard the voluntary sufferings of those heathens appealed to, as furnishing the most convincing proofs of their degraded and miserable condition, and the most powerful arguments, why the Christian believer should exert his every power to convey to them the light, and liberty of the gospel. That such sufferings have not been exaggerated it is but right to believe, since they have been attested by men whose veracity is above suspicion; but were we to note down the torturing agonies which the love of strong drink has occasioned to the inhabitants of London, alone, in one year, and compare them with all the bodily sufferings, which the entire heathenism of the world has produced, in the same space of time, there is reason to believe, that the balance of self-inflicted torture would be found—not on the side of what are justly called "the dark places of the earth," but of our own highly-favoured, but no less guilty metropolises.

The superstition which prompts the pagan idolater to torment his body, in order that he may obtain the favour of his gods, is but

a comparatively rare exhibition of his folly. Like some of the painful austerities of monachism it is but the violent out-breaking of an unusual, and extreme devotion. It is far from being even common among the heathen, not to say general; and to represent it otherwise, is to deceive the ignorant, and not to enlighten them.

Multitudes of the heathen are as desirous of personal and domestic comfort as ourselves; and are as much distinguished by their observance of the charities of life. To assert the contrary, would be to exhibit our want of information, or want of candour. But how stands the case with many of the inhabitants of this Christianized country? In all our populous towns and cities may be found great numbers, who are dragging out a painful—wretched existence, in consequence of the injuries they are, daily, inflicting upon their bodies, by means of the poisonous property of strong drink. They do not, indeed, walk in shoes, into the bottoms of which sharp spikes have been inserted, but they willingly endure the agonizing inflictions of the gout. They do not suspend themselves by hooks, run through some particular part of the body, but they submit to every species of suffering, which the most violent diseases, in the most sensitive organs, can possibly produce. In proof of this, it is not necessary to refer to the poor, emaciated, cringing and crippled beings, who are to be found lingering about our more splendid gin-shops, for there is hardly a family in the land, whether graced with a coronet, and living in a palace, or occupying some low and filthy cellar, in the dirtiest alley of St. Giles's, which cannot produce evidence to prove, that the worshippers of strong drinks are not a whit behind the heathen, in demonstrating their devotion to their idols, by self-inflicted torments.

But, alas! the health of the body is not the only sacrifice which intemperance demands. The health and vigour of the mind are invariably impaired, and often irrecoverably lost, through the deadly influence of strong drink. Melancholy, idiotism, and raving madness, in two cases, out of five, are distinctly traceable to the same fatal cause; and, hence, the man who indulges in the habitual use of this insidiously destructive stimulant is joined to an idol, which may be satisfied with nothing short of the sacrifice of that, in which all his true greatness consists—of that, without which, although he may retain the form and features of a man, he has no pre-eminence above a beast. We may talk, then, of the voluntary sacrifices of the heathen—we may shudder at the thought of their self-inflicted privations and torments—we may pity, or despise the folly, which leads to those self-inflictions, but we shall look in vain for an idolatrous nation, whose sacrifices, of health and ease to the gods, whom they fear, or venerate, surpass those which are made by ourselves, through our idolatrous attachment to intoxicating drinks!

2. *The lover of strong drink sacrifices his true honour, and most enviable reputation.*

The glory of man is his rational and immortal nature—that mind, which bearing a resemblance to the Infinite and Eternal Author of all things, is fitted for communion, not only with the highest of created spirits, but with God himself. But how is this mind disordered—how are its faculties perverted and debased by intoxicating liquor? Until we become, literally, a nation of drunkards, and are constantly steeped in intoxicating drink, it will be impossible not to esteem sobriety a virtue, and intemperance a low and debasing vice. So lost to everything worthy, and honourable, is a man considered to be, who has entitled himself to the loathsome appellation of a drunkard, that an individual must have advanced to the last stage in the career of intemperate drinking, before he will acknowledge that he is deserving of such an epithet.

But as there are degrees in intemperance, and as intemperance of every degree, is an approximation towards the most disreputable of vices, every step we take in the path of inebriety, from that which is marked, merely, by unwonted exhilaration, to that which indicates the absence of all self-control, involves the loss of a measure of real honour, proportioned to the extent to which we have yielded to the influence of the poisonous draught. "Wine," says Solomon, "is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise." As a proof of this, we speak not, now, of the atrocious crimes, which men are, frequently, instigated to commit, when reason has been driven from her throne, by the violence of excited passion. We speak not, now, of the rending of domestic ties—of the breaking-up of all domestic comfort, which has been occasioned by this deadliest destroyer of human happiness. We need not point to the wretch, wallowing in the darkest, and lowest abysses of ignorance, and sensuali-

*For abundant evidence on this subject, the reader is referred to "Bacchus," the Prize Essay—to a pamphlet by Mr. Courteay, asurgeon, of Rainsgate, entitled "The Moderate use of Intoxicating Liquors," to the "Course of Brain;" and to other works published by the New British and Foreign Temperance Society.

ty, for proof that intemperance involves the sacrifice of the most honourable distinctions of our nature. Who, that has seen the amber, or the ruby glass freely circulated among men, who when wholly free from its infatuating power, would be the last to sanction the least approach to unmeaning or licentious levity—who, that has seen our gravest senators, and judges, and magistrates, and even the teachers and professors of the purest faith—the ministers and disciples of the holy Jesus,* sitting around the festal board, and qualling the deceitful cup, has not observed its tendency to disorder the intellect—to obscure the mind's perceptions, of truth, and righteousness, to call into active play those animal feelings, which, when urged to great excess, lead to the most gross and outrageous criminality. The oaths and curses of the blasphemer, and the infidel, may not have been uttered—no songs, inspired by offensive sensuality, may have escaped the lips no brutal violence may have been exhibited; but the loud and senseless laugh has been heard—the most flippant and unprofitable converse, and perhaps the unchaste insinuation. In some cases, the most unmanly, and almost frantic, gestures have been witnessed. All rational decorum, and Christian circumspection have been banished from the scene; and while the actors themselves have appeared devoid of both real self-respect, and of all true and honourable regard for each other, it has been difficult to behold them, but with feelings of pity, if not contempt!

"A good name," says the wise man, "is rather to be chosen than great riches, and loving favour rather than silver and gold;" and so thought one of the greatest poets, that ever struck the British lyre—

"Who steals my purse steals trash—'tis something, nothing;
'Twas mine, 'tis his, and has been slave to thousands;
But he that filches from me my good name,
Robs me of that which no enriches him,
And makes me poor indeed."

But, alas! that treasure, which outweighs all wealth, is daily and hourly, offered upon the altar of intemperance, by countless thousands, in exchange for the momentary gratification, resulting from the service of the god of their idolatry.

PROGRESS OF THE CAUSE.

St. Johns, N. B., Nov. 11.—The St. Johns Total Abstinence Society was formed in March 1832, since which time it has, with various success, steadily maintained the principle by which it has been distinguished from the old temperance societies. Last autumn and winter, the interest excited in the public mind, by means of lecturers employed by our society enabled us to extend to thousands of persons the conviction that the total abstinence plan was the only efficient means of reclaiming the unfortunate drunkard, and securing the rising generation from intemperance; and our society consequently obtained an increase of members far beyond our most sanguine anticipations. We have great satisfaction in stating further, that of those who thus became members, we know of very few indeed who have not faithfully kept the pledge. Finding the good results that followed the lectures delivered last year, we have been anxious to adopt the same plan, and carry it to a greater extent this season, but have been disappointed in our hope of securing the assistance of Mr. Gough, now lecturing in the United States, and who has been represented as just the kind of person we require.—L. S. DEWITT, Pres. St. Johns T. A. S.
E. D. W. RATCHFORD.

*"There is a drinking of healths—by this means forcing, tempting, or occasioning, drinking in others; this is one of the highest provocations to drunkenness. What can be the use of drinking healths? It was a notable saying of a great man, solicited to drink the king's health, 'By your leave, I will pray for the king's health, and drink for my own.' This practice will probably be found to have arisen from heathen idolaters, who used Libamen Jovi, Baccho, &c.: it is certain, there is no vestige of it in Christianity, nor any reason for it."—Durham on the Ten Commandments.

"Such are the sentiments of a great authority, in the Church of Scotland, respecting the irrational, and dangerous custom of health-drinking! and yet the ministers of every Christian denomination have been as forward as others to give their sanction, not only to this custom, but to the equally absurd and injurious practice, of giving toasts, in bumpers of brandied wine at public dinners."

"It would be difficult," says Mr. Dunlop, "to discover the real connexion that exists between wishing prosperity to a cause, or an individual and simultaneously swallowing wine; but it is not difficult to perceive, that an eloquent speech, or pathetic appeal, is in fact, vilified and degraded, by adding a glass of punch to its conclusion."

SALTLEET, Nov. 14, 1844.—The temperance cause in this vicinity is moving majestically and rapidly forward, notwithstanding the scoffs of the incredulous and the sneers of the ignorant; and the usual happy consequences are very generally felt. There are in this township six well organized societies with efficient officers at their heads, embracing about six hundred good substantial members, many of whom have been released from the thralldom of intemperance. In many of these societies, I have had the pleasure to address respectable and attentive audiences, during the past summer, and have been the humble means I trust of adding a goodly number of names to the pledge, and am now almost daily receiving new accessions. There is, however, a most powerful barrier in the township, greatly impeding the progress of the noble cause I am proud to advocate. In the little village of Stoney Creek, containing about thirty families, there are three taverns licensed to sell intoxicating drinks, and as a natural consequence, there are in it and its immediate neighbourhood, several confirmed and occasional drunkards, and many other persons who are in the habit of using spirits, and I do not believe that anything short of the eloquence and influence of a Pollard, a Hawkins, or a Father Mathew, would successfully penetrate their stoney (creek) hearts, and effectually produce a reformation.

Great credit is however due to the Rev. George Cheyne, for his arduous and useful exertions in the reclamation of drunkards, and the general advancement of the temperance cause, the beneficial results of which has been so manifestly felt amongst us; but I have understood that his professional duties are such at present, that he is unable to devote that time and attention to the subject which he otherwise would.

It is with pleasure that I allude to the sentiments of his excellency the Governor General, relative to the temperance reformation in Canada, and to his very liberal donation in aid of the funds of the Montreal Temperance Society; and it cannot otherwise be, that such a noble example will be the means of inducing many who are moving in the ordinary spheres of life, to renounce the bitter cup, and come over to the equitable and popular side of the question—that of truth, morality and virtue, and I humbly trust that the day is not far distant when all other important and responsible office bearers and influential men, will publicly advocate the principles of temperance, and contribute bountifully to the support of such principles. If their pecuniary finances will not admit of their contributing money, let them contribute their names, contribute their example, contribute their united influence, and soon, very soon, the vindicators, the consumers and manufacturers of ardent spirits, will all be triumphantly gathered into the Temperance Garner. Then, and not till then, will this grim monster Alcohol, the origin of so much misery and wo, be banished from our beloved country and the world.—ALEXANDER RANDALL, Sec. Albion Tem. Society.

MR. GOUGH IN MAINE.—The recent visit of Mr. Gough to Maine, seems, notwithstanding the great political excitement, to have resulted in reviving a spirit of enthusiasm in temperance almost equal to any which has existed. We have already noticed his reception at Gardner. At Bangor, the impression made by his addresses was of the deepest character, and in a week 1,700 signed the pledge. Said a Bangor paper of his labors:

"A perfect jubilee of joy is felt by the friends of temperance here. All hearts are exultant, and the tears of inexpressible gratitude fill many eyes. Fathers and mothers greet each other with higher hopes, and clasp their sons that were lost but are found—restored—made whole. A heavenly influence seems to have descended upon our community, and led our young men to rush together in thick masses as a band of brothers to pledge themselves to the cause of temperance. We have reason, all of us, devoutly to thank God for what has transpired here within the week, and in the most efficient part of our society, which heretofore has been untouched. Let the earnest prayer ascend to God from every heart—at every family altar—in every private closet, and in all worshiping assemblies, that the good resolutions made may be kept and the good work be sustained and continued."

TEMPERANCE IN NOVA SCOTIA.—The meeting of the Halifax Temperance Society held on Friday, August 16, was one of more than ordinary interest. The principal subject of discussion was the want, in Halifax, of such accommodations for sailors as should preclude the necessity of their entering those traps of Satan, mis-called "sailors' boarding houses," which line our upper and lower streets. Mr. Howard, the mate of a vessel in the harbor, as we understand, feelingly portrayed the temptations which assail the seamen in our city, and the discouragements to morality and sobriety which meet him at every step. He was followed by a young

seamen of her Majesty's ship *Illustrious*—named Powell—who after describing himself, in the words of the Psalmist, as one of those "that go down to the sea in ships, that do business in great waters"—related a number of incidents which had come under his notice, in the melancholy circumstances of which, Intemperance bore a prominent part. Mr. Powell was the originator of the small but useful Total Abstinence Society on board the *Illustrious*; and the favorable impression which that fact made upon his hearers, was increased by the modesty, simplicity, and pathos, which characterized his narration.

The President and several other gentlemen, among whom was Judge Marshall, made some remarks upon the same subject, and the result of the meeting was the appointment of a committee to investigate the matter, and report upon the best means of ameliorating the condition, in Halifax, of this interesting portion of our fellow beings.

MISCELLANEOUS.

FATHER MATHEW VINDICATED.—On the charge against Father Mathew, that he acceded to Smith O'Brien's pledge, which was that the Irish nation should use none of England's alcoholic drinks until England granted the repeal, Father Mathew nobly writes: *Cork, August 27, 1844.*

To the Editor of the Dublin Monitor :

DEAR SIR,—Accept my sincere thanks for your prompt and able vindication of me in the Monitor of yesterday.

The high eulogium you pass on my character humbles me exceedingly, as you have depicted me not what I am, but what I ought to be.

I hope your praise will stimulate me to a life of greater usefulness and of pure virtue.

It is true that Mr. O'Connell condescended to ask whether I thought Mr. Smith O'Brien's pledge would be injurious to the Total Abstinence Society. I answered—not in the least.

This was all that passed on the subject. I had not the most distant idea of connecting myself with this movement.

I do not administer the pledge for a limited period; and I do not consider Mr. S. O'Brien a teetotaler.

Teetotalism signifies the renunciation of alcoholic drinks for life or as it is in the Irish pledge, go bragh—for ever.—Irish Paper.

PROCLAMATION.—Whereas, a certain man named Ardent Spirits passing also under the several names of Gin, Rum, Brandy, Whisky, and Hollands, whose only place is in the laboratory of the chemist, or the shelves of the apothecary, some time since

Escaped from the custody of his rightful masters.—And whereas the aforesaid Ardent Spirits being of a wicked and diabolical disposition, has assumed the garb of friendship to mankind and womanhood dear subjects, and made them miserable slaves. Many millions of his unfortunate victims he has dragged and is now dragging into crime, poverty, disease, and death. He has led men to disregard their fellow-men, and to stifle the common charities of human nature. He has induced citizens to forget their duties to the community, and give themselves up to debauchery. He has introduced discord and misery into families. He has persuaded sister to rise up against sister, and brother to lift up the hand against brother. He has incited husbands to neglect and ill-treat their wives, and wives to prove dishonest to their husbands. He has led children to rebel against their parents, and parents to cast off their children, yea, even the mother to forget her sucking child.

And whereas, it hath been represented to us, that notwithstanding the said Ardent Spirits has been clearly proved to have been guilty of these great and manifold offences, he is still received into the houses and has the fellowship of many of our good subjects, and entertained by them, and introduced to their relatives and friends as though he were of spotless reputation,

We, therefore, having this matter under our consideration, do hereby command you, as you value your own health and happiness, and are concerned for the well-being of your fellow-subjects, at once, and for ever, to banish the said Ardent Spirits from your habitations, and to cease from any intercourse with him. And we do farther command you as much as in you lies, to aid, and assist our trusty servants' the temperance societies, to capture and bind the said Ardent Spirits, and return him to the sole custody of the apothecary and chemist, his rightful masters as afore said.

Given at our Palace, at Watercourt.

CANADA TEMPERANCE ADVOCATE

"It is good neither to eat flesh, nor drink wine, nor do any thing by which thy brother is made to stumble, or to fall, or is weakened."—Rom. xiv. 21—*Macnight's Translation.*

PLEDGE OF THE MONTREAL TEMPERANCE SOCIETY.

WE, THE UNDERSIGNED, DO AGREE, THAT WE WILL NOT USE INTOXICATING LIQUORS AS A BEVERAGE, NOR TRAFFIC IN THEM; THAT WE WILL NOT PROVIDE THEM AS AN ARTICLE OF ENTERTAINMENT, NOR FOR PERSONS IN OUR EMPLOYMENT; AND THAT IN ALL SUITABLE WAYS WE WILL DISCOUNTNANCE THEIR USE THROUGHOUT THE COMMUNITY.

MONTREAL, DECEMBER 2, 1844.

WINTER.

The winter is fairly upon us—the season pointed out by Providence for especial activity in all moral efforts. Let the temperance men of Canada then at the present juncture, reflect upon their duties and responsibilities, and adopt some systematic and vigorous plan of action for the winter of 1844-5. In order to arrive at just conclusions, let us as temperance men reflect :

1st. That whatever is done to advance the temperance reformation, must, under providence as far as we know, be done by us. No other class of the community will labour to advance this cause—nay, rather all other classes will strive to a greater or less degree against us. It is therefore plain that we are called upon by God and men to come up to the help of this cause against its mighty opponents.

2d. The poor drunkard and his wretched family look to us for help, and that with an agony of longing which should not be disappointed. Let us behold them in their extremity of degradation, extending their hands to us and imploring us to come over and help them; and let us remember that they are brethren and sisters in affliction. Oh! do not let us look upon them coldly and pass by on the other side.

3rd. Every effort made in this cause, unlike many other causes which yet are unquestionably good, is immediately and visibly blessed by God, which should stimulate us to great and unwearied activity seeing we are permitted the great privilege of walking by sight, whilst many are compelled to sow that others may reap.

4th. Let us remember that the whole system of intemperance is one of the most cunningly devised and effective engines of Satan to oppose and retard the coming of Christ's kingdom, and that every step towards its overthrow is a step towards the Millennium.

With these and other such thoughts in our minds, let us all meet at an early day in our respective societies—say upon the day after Christmas, and with solemn thanksgiving to God for past mercies and prayer for direction, let us sit down soberly but resolutely to draw up, each society for itself, a systematic plan of action for the winter. Let us, at the outset, count the cost of time, labour and money, in order that we may undertake no more than we can and ought to perform—but let us be conscientious in performing what we undertake.

A few hints as to the way in which exertions may be best directed will not perhaps be considered out of place, though we would be far from seeking to dictate to any society or individual. We shall put them in the form of questions to a single society:—

1st. Have you, by your committee or deputations, visited every family within your bounds, to ascertain who are willing to sign the pledge or to subscribe for a temperance paper? Such an effort, wherever made, has been greatly blessed. Are you doing your duty if you do not make it?"

2nd. Are you in the habit of keeping up regular temperance meetings and rendering them as interesting and profitable as you can? If not, should you not resolve upon and advertise a series for the winter?

3rd. Do you approve of petitioning the magistrates against all abuses of the present license laws--and of petitioning the Legislature to amend those laws? If so, have you prepared petitions to be extensively signed and presented this winter? This is one of the most effectual and legitimate modes of agitating the question, and keeping it before the influential men of the community.

4th. Are you contributing as individual temperance men to sustain a temperance public-house in your vicinity, or are you sneaking gratis about the ruin holes when you travel or go to market? If the latter, are you not dispised by the tavern-keepers themselves and condemned by your own consciences?

5th. Are you as individuals endeavouring to get up or support libraries, news-rooms, literary and debating societies, agricultural clubs, or other rational substitutes for the excitement of drinking? and if not, are not these objects highly desirable on many accounts.

6th. Are you improving opportunities to recommend the temperance principle in the ordinary intercourse of life and by private conversation?

7th. Are you sustaining the temperance cause by your prayers, efforts and contributions, to the extent that you yourselves acknowledge to be duty? And especially, are you subscribing for and reading a temperance paper, as the means of enlightening and invigorating your zeal and that of your family?

Temperance men of Canada, these questions are affectionately asked, let them be seriously answered.

In conclusion, we again earnestly recommend simultaneous meetings of all the Temperance Societies of Canada, on the 26th December next, for thanksgiving, prayer, and the adoption of plans of usefulness for the winter.

A FEW PLAIN PROMINENT MARKS OF AGREEMENT BETWEEN APOLYON, THE SPIRIT OF THE BOTTOMLESS PIT AND THE SPIRIT OF ALCOHOL.

Being lately a short distance from home, I called at a place of public resort where I saw "entertainment" legibly engraven on a conspicuous place, so that it might be read by him that runneth. There all hands were "entertained" with a certain liquid, which the sippers called *spirits*. The etymology of the thing I was not at all inclined to dispute, for looking at the operations of the Hydra-headed monster, I at once thought he must be a contemporary crone and auxiliary of *Diabolus* himself; for, from some of the developments he was pleased to make of himself to some of his friends and well-wishers, even in my presence, I concluded he was also a foul and false spirit. Yes, a good creature of God—the support of life, was perverted from its obvious and natural design, and converted into an unruly evil full of deadly poison.

Moreover, I perceived from the movements of the monster to and fro, that in real serpentine style he crawled upon his belly. Hence his degradation. Among all things in existence, (out of the infernal regions at least) nothing is seen so repulsive and revolting as this transforming and degrading spirit. But infinitely more than this, the creature bites like a serpent, and stings like an adder—aye, and its sting pierces not only the body, but strikes also the soul; and after torturing through life till death, unless an antidote is applied, it will go on tormenting its wretched victim while eternity endures.

The statute book of heaven—that eternal rule of right and wrong, which always calls things by their proper names—declares of the arch apostate spirit, that he was a murderer from the beginning—styles him Apolyon, the Destroyer &c. Now the history of the rise and reign of alcohol is written in characters of blood, and is full of lamentations, mourning and woe. The demon of intemperance who marches with steady step through the length

and breadth of our land, in the wide and frightful destruction which marks his progress, may be compared with the great red dragon of the Apocalypse, that drew after him the third part of the stars of heaven, and cast them to the earth. Ten thousand bleeding and crushed families are in the track of this demon, and joys of earth and hopes of heaven lie thickly in the common ruin. Drunkenness murders character, ruins reputation and usefulness. The drunken madman murders himself, body and soul, and sinks not alone to perdition, but drags others to the doleful regions of death and hell.

Surely if Satan—the devil himself—had exerted all the powers of his mighty mind, even he could not have invented a more efficient engine for the ruin of our race, than the whole apparatus of making, vending and drinking this accursed thing. Fearful examples abound everywhere, and declare it no small or imaginary evil. Not far from the place where I now sit, a drunkard fell into a potash kettle while melting, and was consumed in liquid fire. Another at a "logging bee," crawled upon a pile of wood already on fire, and presently he wakened up to all the horrors of a drunkard's eternity. Such appalling scenes cease however to move the minds of men, because of their almost daily occurrence. Ruin is the result of its operations in every country and climate, and among every gradation of mankind. It has ever been so, is now, and will continue to be, till the fell destroyer is stopped in his work of destruction and of death; and methinks this demon was a murderer from the beginning, he is also a lying spirit. Wherever his standard is set up, and the complex movements of this infernal machine are with rapidity performing their work of death; instead of "Entertainment," &c. its sign-board should stand forth conspicuously with this inscription on it "Body and Soul ruined here, with all possible despatch, and upon the lowest terms."

Finally, from this cursory view of the subject, we infer what the proper name and character of this demon of earth is; his name is Legion, and death and hell follow in rapid succession.

Am I my brother's keeper? exclaimed the first murderer of mankind when tormented before the time; and he is still a murderer who acts under the impression that he is not so. But let us as philanthropists and Christians remember, responsibility to the Lord of Hosts for the influence we are exerting in the world. The law of love requires our endeavours to preserve the lives of others and also our own. But the drunkard, in direct violation of this just and good law, persists in poisoning his body, and murdering his soul, and the drunkard maker, spreading around him the instruments of death and damnation.

Beckwith.

D. C.

Suitable Ways No. 3.

SHALL WE AMALGAMATE THE PLEDGES?

The moderation pledge, was the parent and pioneer of the total abstinence reformation, and sustains the relationship to the improved and more perfect pledge that morality does to religion. He who when assailed by temptations to drink, flees to moderation for protection, is like the man who leans on the broken reed of morality for salvation, when nought but the Cross of Christ can redeem him. The moderation pledge prepared the way for the introduction and reception of a safer, better and more consistent plan to ameliorate the condition of our race; for observation and experience soon taught the disinterested and enlightened promoters of sobriety, the inefficiency of half way measures. The occasional drinker sets a pernicious example—sanctions the drinking usages—supports the liquor maker and vender—defends and dignifies a dangerous habit—extends and perpetuates intemperance, whilst he serves his apprenticeship to drunkenness; and yet he

can, without the least sacrifice, become a *worthy* member of a moderation society, and retain his membership whilst he clings to his cups. The drunkard, providing he will substitute one kind of inebriating drink for another, can unite with such an institution and preserve his connection with it until driven by the baneful appetite it tolerates and encourages, he resumes his glass with keener relish and duller sensibility. As well might Satan rebuke sin as a moderate drinker complain of a drunkard; for he who drinks wine, beer and cider "now and then," although he may not wallow in the mire and wear the mark of the beast on his countenance, is a greater obstacle in the path of true temperance than he whose bloated features and blood stained eye proclaim him a sinner, whose disgusting and contemptible example no respectable person would wish to imitate. Drunkenness is a vice that grows with our growth and strengthens with our weakness; the more powerful the appetite becomes the less power have we to resist. The moderate drinker lays the foundation of that appetite—he enkindles the incendiary fires in the throat which many waters cannot extinguish—he is like the self-righteous Pharisee who thanks God he is not like the poor drunkard—he is good enough without improvement, and safe enough without the protection of total abstinence—his head and heart are inaccessible, for he has fled to the dilapidated castle of moderate drinking for safety. Whitewash the moderation system as much as you please, it is full of rottenness and dead men's bones, and the mouths of its drinking friends too frequently are like the mouths of open sepulchres. Shall we, who are the non-compromising friends of entire abstinence, enter into co-partnership with our greatest opponents—shall we tawn and cringe around the haters of our cause. When Paganism and Christianity combine—when vice and virtue amalgamate—when truth and error become co-labourers by written agreement, and not till then, will we form such an unnatural and unholy alliance. It would crown the climax of folly to say such a union would strengthen us; it would be like endeavouring to make a house stand by dividing it against itself. It would be absurd to affirm that we should mutually benefit each other, for such a union would preclude the possibility of our reforming their society, and furnish them every facility for corrupting ours; because vice is more easily learned than virtue. Who would make the insane attempt to wed the pledges for the benefit of the moderate consumer of intoxicating drinks—for he could gratify his passion for drink and retain his standing in the society? Who would be so injudicious as to exert himself to consummate such a compact for the benefit of the unfortunate drunkard under such circumstances; if he relinquished his cups, in a short time he would resume them again, and drink till the fires of Sodom and Gomorrah gleamed in his face; he would sink lower and still lower in the mire of dissipation and degradation, until there would be no sorrow in his tears, no sincerity in petitions, no benevolence in his devotions, no faith in his belief, no firmness in his resolutions, and no hope to illuminate his pathway to eternity. Delirium with its hell of horrors would torture him by day, and the foggy dreams of a distorted and shattered intellect would rob him of his rest at night, in spite of the useless and worse than useless exertions of a mongrel half-hearted system of reform. The moderate pledge has been weighed in the balance and found wanting—it does not call on us to abstain from all appearances of the evil of drunkenness—it does not restrain the moderate drinker or effectually reclaim the excessive drinker—it does not show where moderation ceases and intemperance begins—it has been forsaken by its originators and former supporters, because they saw its inapplicability and inefficiency—it is now on the verge of dissolution, and when it dies, no sincere and intelligent friend of temperance will weep over its grave. The tipplers, toppers, brewers, bar-tenders and tavern-keepers, are its most *ardent* friends and most *spirited* defenders. The Delavans and Mathews,

the most influential, intellectual and disinterested friends of total abstinence throughout the world—are opposed to the *temptation* pledge, and do not hesitate to declare it the greatest, or one of the greatest barriers in our way. Who does not know that he who climbs Vesuvius moderately blindfolded, is in danger of falling into the *crater*, whilst he who walks away from its base is safe, in the event of an eruption. We live in the nineteenth century, under the full blaze of light and truth, in an age of revival and reform, and shall we voluntarily surrender our cause into the hands of "moderate" men? G. W. BUNGA.

STONEY CREEK, October 30, 1844.

TO SUBSCRIBERS.

We earnestly request intending subscribers for the next volume of the *Advocate*, which begins with the new year, to remit during this month, as those who delay till after the volume is commenced cannot be certain of receiving the first numbers. Terms, 2s. 6d. per annum, in advance. Eleven copies for five dollars.

N. B.—We would suggest that each old subscriber not only remit his own subscription but endeavour to induce some of his neighbours, who do not now subscribe, to join him. If each obtained one, the circulation and usefulness of the *Advocate* would be doubled.

THE ANNIVERSARY MEETING OF THE MONTREAL TEMPERANCE SOCIETY.

This interesting and important meeting is to take place earlier this season than usual, viz., on Thursday, the 12th December, in order to make some new and, it is to be hoped, more efficient arrangements before entering upon the active operations of the winter. Indeed it appears more suitable in every way, that the Anniversary Meeting should be held in the beginning of winter, in order that the retiring Committee may chronicle what has been done during the year, and leave the new Committee good time to make its arrangements for the coming year. The Montreal Society was established on the total abstinence principles, in October, 1835, and, we think, a brief account of its proceedings since that time would be an interesting history.

EDUCATION.

Health of the Brain Considered with reference to Education.

BY DR. COMBE

The second condition required for the health of the brain is a due supply of properly oxygenated blood. The effects of slight differences in the quality of the blood are not easily recognized, but, when extreme, they are too obvious to be overlooked. If the stimulus of arterial blood be altogether withdrawn, the brain ceases to act, and sensibility and consciousness become extinct. Thus, when fixed air is inhaled, the blood circulating through the lungs does not undergo that process of organization which is essential to life; and as it is in this state unfit to support the action of the brain, the mental functions become impaired, and death speedily closes the scene. If, on the other hand, the blood be too highly oxygenated, as by breathing oxygen gas instead of common air, the brain is too much stimulated, and an intensity of action bordering on inflammation, takes place, which also soon terminates in death.

Such are the consequences of the two extremes; but the slighter variations in the state of the blood have equally sure, although less palpable, effects. If its vitality be impaired by breathing an atmosphere so much vitiated as to be insufficient to produce the proper degree of oxygenation, the blood then affords an imperfect stimulus to the brain; and, as a necessary consequence, languor and inactivity of the mental and nervous functions ensue, and a tendency to headache, syncope, or hysteria, makes its appearance. This is seen every day in the listlessness and apathy prevalent in crowded and ill ventilated schools; and

in the headaches and liability to fainting which are so sure to attack persons of a delicate habit in the contaminated atmospheres of crowded theatres, churches, and assemblies. It is seen less strikingly, but more permanently, in the irritable and sensitive condition of the inmates of cotton-manufactories and public hospitals. In these instances, the operation of the principle cannot be disputed, for the languor and nervous debility consequent on confinement in ill-ventilated apartments, or in air vitiated by the breath of many people, are neither more nor less than minor degrees of the same process of poisoning to which I have formerly alluded. It is not real debility which produces them; for access to the open air almost instantly restores activity and vigour to both mind and body, unless the exposure has been very long, in which case more is required to re-establish the exhausted powers of the brain. A good deal of observation has convinced me that the transmission of imperfectly oxygenated blood to the brain, is greatly more influential in the production of nervous disease and delicacy of constitution, than is commonly imagined; and I am delighted to see the same truth so powerfully insisted on by Mr. Thackrah, from extensive experience in the manufacturing districts about Leeds.

As an example of the influence of the blood upon the activity of the brain and mind, I may mention a case which has lately been kindly communicated to me by an able and experienced teacher in England. A young boy, J. A., of a mixed bilious and nervous temperament, and eleven and a half years of age, with a languid circulation, and feebly developed chest and heart, is so directly acted upon by the supply of blood to the brain, that he seems "to be two different characters" when sitting up and lying down. In the former attitude when the head is scantily supplied with blood, he looks "apathetic and even sullen;" whereas, when lying down and the circulation is assisted by the natural gravity of the blood, his real powers of mind become manifest, and he is "animated, talkative, and highly intelligent." This case deserves attention, both because it is in itself of a striking nature, and because it was not communicated as an illustration of the point under discussion, but merely in reference to the general discipline of the institution.

Although, in delicate constitutions, the health of the brain and nervous system is often impaired by inadequate nutrition, and a due supply of nourishing food is therefore indispensable to their wellbeing; yet, as this condition is implied in the preceding, and its separate consideration would lead us too far from our main object, I shall not dwell upon it here. I shall merely state, that starvation often affects the brain so much as to produce ferocious delirium. This result was most painfully exemplified some years ago, after the wreck of the Medusa French frigate, on the coast of Africa, when scenes of cruelty and horror took place under the influence of hunger, which it is impossible to read without shuddering. In the Milanese, also, a species of insanity arising from defective nourishment is very prevalent, and is easily cured by the nourishing diet provided in the hospitals to which the patients are sent. I have seen the mental functions weakened, and the brain disordered, by the same cause—inadequate nutrition—at the period of rapid growth. This defective nutrition, however, it must be observed, does not always depend on want of proper food. On the contrary, it is often the result, among the higher classes, of too much or too stimulating food over exciting, and ultimately impairing, the digestive powers. The proneness to morbid excitement in the brain, induced by insufficient food, is one cause why, in times of public distress, the lower orders are so apt to resort to violence to remove the sources of their discontent.

The third condition of health in the brain and nervous system, and that to which it is my chief object in the present chapter to direct attention, is the regular exercise of their respective functions, according to the laws already so frequently referred to, and so fully explained in a preceding part of this work.

The brain, being an organized part, is subject, in so far as regards its exercise, to precisely the same laws as the other organs of the body. If it be doomed to inactivity, its health decays, and the mental operations and feelings, as a necessary consequence, become dull, feeble, and slow. If it be duly exercised, after regular intervals of repose, the mind acquires readiness and strength; and lastly, if it be over-taxed, in either the force or the duration of its activity, its functions become impaired, and irritability and disease take the place of health and vigour.

The consequences of *inadequate exercise* may be first explained. We have seen that, by disuse, muscles become emaciated, bone softens, bloodvessels are obliterated, and nerves lose their charac-

teristic structure. The brain is no exception to this general rule. Of it also the tone is impaired by permanent inactivity, and it becomes less fit to manifest the mental powers with readiness and energy. Nor will this surprise any reflecting person, who considers that the brain, as a part of the same animal system, is nourished by the same blood, and regulated by the same vital laws, as the muscles, bones, and nerves.

It is the weakening and depressing effect upon the brain of the withdrawal of the stimulus necessary for its healthy exercise, which renders solitary confinement so severe a punishment even to the most daring minds; and it is a lower degree of the same cause, which renders continuous seclusion from society so injurious to both mental and bodily soundness, and which often renders the situation of governesses one of misery and bad health, even where every kindness is meant to be shewn towards them. In many families, especially in the higher ranks, the governess lives so secluded, that she is as much out of society as if she were placed in solitary confinement. She is too much above the domestics to make companions of them, and too much below her employers to be treated by them either with confidence or as their equal. With feelings as acute, interests as dear to her, and a judgment as sound as those of any of the persons who scarcely notice her existence, she is denied every opportunity of gratifying the first or expressing the last, merely because she is "only the governess;" as if governesses were not made of the same flesh and blood, and sent into the world by the same Creator, as their more fortunate employers. It is, I believe, beyond question, that much unhappiness, and not unfrequently madness itself, are unintentionally caused by this cold and inconsiderate treatment. For the same reason, those who are cut off from social converse by any bodily infirmity, often become discontented and morose in spite of every resolution to the contrary. The feelings and faculties of the mind, which had formerly full play in their intercourse with their fellow-creatures, have no longer scope for sufficient exercise, and the almost inevitable result is irritability and weakness in the corresponding parts of the brain.

This fact is particularly observed among the deaf and blind, in whom, from their being precluded from a full participation in the same sources of interest as their more favoured brethren, irritability, weakness of mind, and idiocy, are known to be much more prevalent than among other classes of people. In the *Dictionnaire de Médecine* (vol. xx. p. 877), Andral gives a description of the deaf and dumb, every word of which bears a direct reference to the above principle; and a nearly similar account has been lately given of the blind by an equally intelligent observer. "The deaf and dumb," says Andral, "presents, in his intelligence, character, and the development of his passions, certain modifications which depend on his state of isolation in the midst of society. He remains habitually in a state of half childishness, is very credulous, but like the savage, remains free from many of the prejudices acquired in society. In him the tender feelings are not deep; he appears susceptible neither of strong attachment nor of lively gratitude; pity moves him feebly; he has little emulation, few enjoyments, and few desires. This is what is commonly observed in the deaf and dumb, but the picture is far from being of universal application; some, more happily endowed, are remarkable for the great development of their intellectual and moral nature, but others, on the contrary, remain immersed in complete idiocy." Andral adds that we must not infer from this, that the deaf and dumb are therefore constitutionally inferior in mind to other men. "Their powers are not developed, because they live isolated from society: place them, by some means or other, in relation with their fellow-men, and they will become their equals." This is the cause of the rapid brightening up of both mind and features, which so often observed in blind or deaf children, when transferred from home to public institutions, and there taught the means of converse with their fellows. In these instructive instances, the whole change is from a state of inactivity of the mind and brain to that of their wholesome and regular exercise.

Education and Crime.

The returns of the Metropolitan Police Commissioners for the past year, give some curious statements of the relative degree of education connected with the different kinds of offences coming within the cognizance of the police. The total number of persons taken into custody was 62,477, or 42,805 males and 19,672 females, of whom 31,670, or more than one half, were discharged by the magistrates. There were 26,171, summarily convicted or held to bail, and 1636 for trial. Of these 3455 were convicted

and sentenced, and 831 acquitted, while there were 350 cases in which bills were not found, or the parties prosecuted. Of the whole, 16,918, consisting of 11,336 males and 5582 females, could neither read nor write; 39,067 of whom 25,897 were males and 13,170 females, could only read and write imperfectly; 5823, or 4918 males and 905 females could read and write well; and 669, or 654 males and 15 females were of superior education. Of 26,171 who were summarily convicted or held to bail, 7043 could not read or write, 15,924 did so imperfectly, 2864 read or wrote well, and 320 had received superior instruction; whilst of 4455 tried and convicted, 1164 could neither read nor write. 2088 could do so but imperfectly, 172 could do so well; and 30 males and one female only were of superior education.

HORRORS OF WAR.—It has been estimated by Dr Thomas Dick, that, since the creation of the world, fourteen thousand millions of beings have fallen in the battles which man has waged against his fellow-creature—man. If this amazing number of men were to hold each other by the hand, at arm's length, they would extend over fourteen millions, five hundred and eighty-three thousand, three hundred and thirty-three miles of ground, and would encircle the globe on which we dwell 608 times! If we allow the weight of a man to be on an average one cwt. (and that is, if anything, below the mark,) we shall come to the conclusion, that 6,250,000 tons of human flesh have been mangled, disfigured, gashed, and trampled under foot. The calculation will appear more striking when we state, that, if the forefingers only of every one of those fourteen thousand millions of beings were to be laid out in a straight line, they would reach more than six hundred thousand miles beyond the moon, and that if a person were to undertake to count the number, allowing nineteen hours a day, and seven days to the week, at the rate of 6,000 per hour, it would occupy that person 336 years; and, awful is the consideration, 350,000 pipes of human blood have been spilt in battles. Who would not exclaim with Bishop Hall, "Give me the man who can devise how to save troops of men from killing; his name shall have room in my calendar." There is more true honour in a civic garland for the preserving of one subject, than in a laurel for the victory over many enemies." Or, with Bishop Taylor, "If men were only subject to Christ's law, then could they never go to war with each other!"

Wise Bequest.—Mr. Dick, a native of Forres, in Morayshire, was born in 1748. He went to the West Indies, where his talents and industry soon enabled him to amass a large fortune. He returned to England, and dying in 1828, left a capital of £113,147 sterling, to be invested as a fund for increasing the salaries of schoolmasters in the three counties of Moray, Banff, and Aberdeen. Here is a lesson for foolish men how to leave their money wisely.—*Tait's Magazine.*

The Sabbath school teacher should recollect, that every child that comes into the school, brings five things with him; intellect, conscience, affection, a will, and hopes; and all depraved, misplaced, misemployed. He should aim to find something to set over against each of these; truth for the intellect, the atonement for the conscience, God for the affections, grace for the will, and glory for the hopes.

PARENTS AND CHILDREN'S DEPARTMENT.

Religious Instruction.

FROM ABBOT'S "MOTHER AT HOME."

1. Very great success has attended the efforts which have been made to collect children in Sabbath schools for religious instruction. Maternal associations have been of inestimable value. But nothing can supersede the necessity of effort and instruction at the fire-side. The mother must collect her little flock around her and take upon herself the responsibility of their religious education. She may find enjoyment and improvement in associating with others for prayer; and if she be faithful, she will see that her children are punctual attendants of the Sabbath school. But she will not regard these as exonerating herself in the least degree from responsibility. The influence of Sabbath schools has undoubtedly been to awaken more general interest at home in behalf of the spiritual welfare of children. Still there is danger that some parents may feel that the responsibility is transferred from themselves to the Sabbath school teachers; and that they accomplish their duty in seeing them punctually at school with their lessons well committed. It is, however, of the first importance

that home should be the sanctuary of religious instruction. The mother must be the earnest and affectionate guide to the Saviour. She must take her little ones by the hand and lead them in the paths of piety.

No one else can possibly have the influence which a mother may possess, or the facilities which she enjoys. She knows the various dispositions of her children; their habits of thought; their modes of mind. Thus can she adapt instruction to their wants. She alone can improve the numberless occurrences which open the mind for instruction, and give it susceptibility to religious impression. She is with them when they are in sickness or pain. She can take advantage of the calm of the morning, and of the solemn stillness of the evening. In moments of sadness she can point their minds to brighter worlds, and to more satisfying joys. God has conferred upon the mother advantages which no one else can possess. With these advantages he has connected responsibilities which cannot be laid aside, or transferred to another. At home, and by the parents, the great duty of religious education must be faithfully performed. The quiet fire-side is the most sacred sanctuary; maternal affection is the most eloquent pleader, and an obedient child is the most promising subject of religious impression. Let mothers feel this as they ought, and they will seldom see their children leave the paternal roof unfortified with Christian principles and sincere piety.

2. *Parents must have deep devotional feelings themselves.* It is certainly vain to hope that you can induce your children to fix their affections upon another world, while yours are fixed upon this. Your example will counteract all the influence of your instructions. Unless Christian feelings animate your heart, it is folly to expect that you can instill those principles into the hearts of your children. They will imitate your example. They confide in your guidance. That little child which God has given you, and which is so happy in your affection, feels safe in cherishing those feelings which it sees you are cherishing. And, mother! can you look upon your confiding child and witness all her fond endearments and warm embraces, and not feel remorse in the consciousness that your example is leading her away from God, and consigning her to ceaseless sorrow?

You love your child. Your child loves you, and cannot dream that you are abusing its confidence, and leading it in the paths of sin and destruction. How would it be shocked in being told that its mother is the cruel betrayer of its eternal happiness! You are wedded to the world. You have not given your heart to God. Not content with being the destroyer of your own soul, you must carry with you to the world of woe, the child who is loving you as its mother and its friend. O there is an aggravation of cruelty in this which cannot be described. One would think that every smile would disturb your peace; that every proof of affection would pierce your heart; that remorse would keep you awake at midnight, and embitter every hour. The murderer of the body can scarce withstand the stings of conscience. But, O unchristian mother! you are the destroyer of the soul. And of whose soul? The soul of your own confiding child. We cannot speak less plainly on this topic. We plead the unparalleled wrongs of children, betrayed by a mother's smile and a mother's kiss. Satan led Adam from Paradise. Judas betrayed his Master. But here we see a mother leading her child, her own immortal child, far from God and peace, to the rebellion of worldliness and the storms of retribution. That little child following in your footsteps, is the heir of eternity. It is to survive the lapse of all coming years: to emerge from the corruptions of the grave; to expand in spiritual existence, soaring in the angel's lofty flight, or groping in the demon's gloom. Thou, O mother! art its guide to immortality; to heaven's green pastures, or to despair's dreary wastes. If you go on in unrepented sin, your child, in all probability, will go with you.

We have heard of a child, upon her dying bed, raising her eyes to her parents and exclaiming, in bitterness of spirit, "O my parents! you never told me of death, or urged me to prepare for it; and now," said she, bursting into an agony of tears, "I am dying, and my soul is lost." She died. Her sun went down in darkness. What were the feelings of those parents! What agony must have rent their bosoms! How must the spectre of their ruined daughter pursue them in all the employments of the day, and disturb their slumbers by night. But you must meet your children again. The trump of judgment will summon you to the bar of Christ. How fruitless would be the attempt to describe your feelings there!

"That awful day will surely come;
The appointed hour makes haste."

Death is succeeded by judgment, and judgment by eternity. If you are the destroyer of your child, through eternity you must bear its reproaches. You must gaze upon the wreck of its immortal spirit, while conscience says that, if you had been faithful, yourself and your child might have been reposing in heaven. Think not that you can go in one path, and induce your child to walk in another. You must not only "point to heaven," but "lead the way." The first thing to be done, is for a mother to give her own heart to God. Become a Christian yourself, and then you may hope for God's blessing upon your efforts to lead your child to the Saviour. We do entreat every mother who reads these pages, as she values her own happiness and the happiness of her children, immediately to surrender her heart to God. Atoning blood has removed every difficulty from the way. The Holy Spirit is ready, in answer to your prayers, to grant you all needful assistance. Every hour that you neglect this duty, you are leading your children farther from God, and rendering the prospect of their return more hopeless.

3. *Present religion in a cheerful aspect.* There is no real enjoyment without piety. The tendency of religion is to make us happy here and hereafter; to divest the mind of gloom, and fill it with joy. Many parents err in this respect. They dwell too much upon the terrors of the law. They speak with countenances saddened and gloomy. Religion becomes to the child an unwelcome topic, and is regarded as destructive of happiness. The idea of God is associated with gloom and terror. Many parents have, in their latter years, become convinced of the injudicious course they have pursued in this respect. They have so connected religious considerations with melancholy countenances and mournful tones of voice, as to cause the subject to be unnecessarily repugnant.

We may, indeed, err upon the other extreme. The nature of sin, and the justice of God, and the awful penalty of his law, should be distinctly exhibited. The child should be taught to regard God as that being who, while he loves his creatures, cannot look upon sin but with abhorrence. If we speak to children simply of the Creator's goodness, as manifested in the favors we are daily receiving, an erroneous impression of God's character will be conveyed. It is to be feared that many deceive themselves in thinking they love God. They have in their minds a poetic idea of an amiable and sentimental being, whose character is composed of fondness and indulgence. Such persons are as far from worshipping the true God, as is the Indian devotee or the sensual Moslem. God must be represented as he has exhibited himself to us in the Bible and in the works of nature. He is a God of love, and a consuming fire. He is to be regarded with our warmest affections, and also with reverence and godly fear. Let, therefore, children distinctly understand that sin cannot pass unpunished. But it should also be understood that judgment is God's strange work. Ordinarily speak of his goodness. Show his readiness to forgive. Excite the gratitude of the child by speaking of the joys of heaven. Thus let the duties of religion ever be connected with feelings of enjoyment and images of happiness, that the child may perceive that gloom and sorrow are connected only with disobedience and ireligion. There is enough in the promised joys of heaven to rouse a child's most animated feelings. This subject has more to cheer the youthful heart than any other which can be presented. Appeal to gratitude. Excite hope. Speak of the promised reward. Thus may you most reasonably hope to lead your child to love its Maker, and to live for heaven. Reserve the terrors of the law for solemn occasions, when you may produce a deep and abiding impression. If you are continually introducing these motives, the mind becomes hardened against their influence; religion becomes a disagreeable topic, and the inveteracy of sin is confirmed.

THE ROLLO PHILOSOPHY.

CHAPTER IV.

EVAPORATION.

"There are several circumstances," said Rollo's mother, in continuing the conversation, "which make the air take up water faster than it otherwise would, or which promote evaporation, as the philosophers call it. One is warmth. If you warm a board or paper that is wet, or warm the air which lies over it, the moisture will evaporate much quicker. That is the reason why, when we want anything to dry quick, we hold it to the fire."

"Is it?" said Rollo.

"Yes," said his mother. "Air can only hold a certain quantity of moisture, though warm air can hold more than cold. So, if we want air to take up as much water as possible, and as fast as possible, we must warm it. Then, if we allow this warm air to take up as much water as it will hold, and afterwards cool it, there will be more in it than it will hold."

"And what becomes of the—the—rest?"

"The surplus?" asked his mother.

"Yes, the surplus."

"Why, that falls down out of the air again in drops.—large or small drops. That is the way that it comes to rain. The warm air, in the long summer days, lies over the sea, and ponds, and rivers,, and takes up water, as much, perhaps, or nearly as much, as the warm air can hold. This air then rises up where it is colder, or is moved in winds, off to the north, and thus gets cooled, and then it can no longer hold the moisture it contains; and so it falls down in drops of rain, or in hail, or in snow."

"Is that the way?" said Rollo.

"Yes," replied his mother. "There is a phenomenon which takes place in houses, in the winter, which is just like this, in principle. In the daytime, when the room is warm, the air takes up moisture from our breaths, and from various other sources, until it has more than cold air can contain. Then, in the night, the cold air, outside of the windows, cools the glass, and through the glass the air in the room which touches the glass; and so the moisture leaves the air, and attaches itself to the glass, and makes the beautiful frost work you have seen so often."

"So, with our breaths, in a cold, frosty morning," she continued, "the air which we breathe, when it comes up from the lungs, is warm, and takes up a great deal of moisture from all the passages which it comes through. Then, when it comes out into the cold, it is suddenly cooled, and cannot hold so much; and so the surplus becomes visible in little drops."

"Little drops?" said Rollo.

"Yes," said she. "That vapory appearance we see in a cold morning, like a little fog, is formed of little drops of water, too small for us to distinguish one by one, though all together they make a sort of haze. But it vanishes pretty quick."

"What makes the little drops vanish?" asked Rollo.

"Why, they spread about in the other air, and are redissolved; that is, the particles that compose them are taken up again by the air, and so they disappear."

"That's curious," said Rollo.

"I think it is very curious," said his mother.

"The evaporation of water is going on all the time," she continued, "from all ponds, and lakes, and seas, and rivers,—from the ground, the leaves of trees, the brooks—from all vessels of water, or watery liquids—and from all wet things, of every kind; and thus the air is continually receiving new supplies"

"Then there is another way by which water is turned into vapor, besides being taken up by the atmosphere, that is, by boiling it, and thus changing it into steam."

"I have seen steam coming out of the nose of the tea-kettle," said Rollo.

"What you saw is not strictly steam," said his mother, "though it is commonly called so. Real steam is invisible."

"Is it?" said Rollo.

"Yes," said his mother. "If you heat water very hot indeed, it turns into a kind of hot, scalding air, which is called steam. This steam is, in fact, water, spread out, as it were, very thin, and pressing out in every direction, just like air, only it is all composed of particles of water; and as soon as you let it cool, it turns back to water again. So, you see, there are two ways of getting water off from an iron which is wet with it. The first way is, to have the iron out in the air, and the air will gradually take all the water up, by its attraction for it; and, if you warm the iron or the air a little, it will take it up all the faster. But the second way is, to put the iron over the fire, and heat it very hot indeed; then the water will turn at once into steam, and it would go off from the iron whether there was any air over it or not. In fact, if there is a good deal of water, the steam will push the air away, and rise up in its place."

"And what becomes of the steam," said Rollo, "after it goes away from the iron?"

"Why, as soon as it should get away from the hot iron, and mix a little with the other air, it would cool, and turn into little drops of water again, which would make a little white cloud. That is the way when a tea-kettle is boiling. The fire below heats the bottom of the kettle so hot, that the water next to it turns into steam. This steam now is a great deal lighter than

the water; and so it rises up through it, in great bubbles. If the fire is very hot, these bubbles of steam come up very fast, and make the boiling noise that we hear. This bubbling and boiling is because the fire is *under* the kettle, and, consequently, the bubbles of steam are formed at the bottom, and have to rise up through the water. If the heat were to come only upon the top of the water, I suppose there would be no bubbling; for the steam would be formed there, and would pass off at once, silently, without bubbling through the water at all.

"Now, when these bubbles come up to the upper part of the kettle, they fill the whole space above the water with steam; and, if you could peep in there, you would see that there was no cloudy appearance of vapor there; it would be pure and transparent, like air."

"Did you ever peep in, mother?" said Rollo.

"No," said she.

"Then how do you know, mother," asked Rollo, "if you never looked?"

"Because I have seen water boiled in a glass flask; and then I could see through the sides of the flask, and it was all perfectly transparent and colorless; though, as soon as the steam came out of the top, into the cool air, it turned into a column of visible vapor. Besides, if you look into the nose of the tea-kettle, you will see that there is no appearance of any cloudiness within; nor even without, until the steam has got away a little distance from the hot iron, so as to be cooled a little. You can see it, too, in chimneys, where wood is burning, or any other fuel which contains moisture. In a cold morning, a cloud of steam, as it is generally called, comes out from the top; but it does not begin to show itself until it has got up a foot or two above the top of the chimney; for it comes out so hot, that it must proceed a little way into the air to get cool enough to turn back into water again, or, as they call it, to be *condensed*."

"So, you see, there are two ways by which water may be carried off into the air. One is, by boiling it, and turning it into steam; and in this case it goes off in a mass, which is, in fact, all water though it appears like air. The other way is, to let the air gradually take it up, by its attraction; and, in this case, it mingles with the air, and floats away. And when steam goes up into the air, it almost immediately becomes condensed into a cloud of very small, watery globules, and these are then gradually dissolved by the air."

"If it were not for these modes by which water is carried up and diffused through the air, the world would soon be in a sad condition."

"Would it?" said Rollo.

"Yes. I think the consequences would be as dreadful as those your father said we should suffer if water were to be deprived of its adhesive and cohesive properties."

"What would the consequences be?" asked Rollo.

"Why, in the first place, if anything was once wet, we could never dry it."

"Couldn't we, possibly," said Rollo, "in any way?"

"It would be very difficult," said his mother. "It would be something as it is now with oil. If we get oil upon our clothes or hands, or upon a board, it is very difficult to get it out. The reason is, the atmosphere will not take it up. And we cannot easily contrive any way to remove it. If the air would not take up water, then, whenever we should wet our hands, they would have to remain wet. And every thing else which we might touch would be wet. There would be no such things as drying anything."

"Then, again, the ground would be permanently wet and muddy. For, if the atmosphere had no attraction for water, all the water which is now in the atmosphere would fall at once, and flood the ground. A great part of this would run off into the rivers and into the sea; but enough would be retained by the attraction of cohesion to make every thing wet and disagreeable. It would be as if it should rain oil until everything was drenched with it; and then a large portion might run off, but still it would leave everything soaked with oil, never more to be dry."

"And then we could never have any more rain. For after the water, which is now in the atmosphere, had fallen down, no more could ever get up; and, of course, we should never have any more clouds or rain. The streams, of every kind, would soon all run off in the sea, leaving their bottoms forever muddy; and then everything would continue wet, wet everywhere and perpetually. So you see, Rollo, how nicely the properties of water have been arranged to make this world a pleasant place for us to live in."

Here Rollo's mother put away her work, and said that she

could not talk with him any longer; and he went out to find Jonas, to tell him what he had learned in answer to his second question.

Rollo met Jonas going into the garden to his work, and Jonas asked him to go out with him for he wanted to talk with him a little. While Jonas was at his work hoeing, he told Rollo that he had thought of an experiment to prove to him that water does not all dry up "to nothing," as Rollo had thought.

"O, I know it does not, now," said Rollo; "mother has explained it to me. It goes off into the air, in very fine, invisible particles. But what was your experiment?"

"Will you try it," said Jonas, "if I will explain it to you?"

"Yes," said Rollo, "if I can."

"Very well; first you must go into the house, and get a phial."

"What kind of a phial?" said Rollo.

"O, any kind of small phial; you had better get one out of the medicine closet, that is about empty, and ought to be washed out, and carry it to the pump, and wash it out clean, and then bring it to me."

So Rollo went, and asked his mother to give him such a phial; and she did so. Rollo brought it to the pump, and tried to pump water into it, but the water would not go in. It poured down in torrents all over the sides of it, but very little would go in. He, however, at length succeeded in getting as much as was necessary for washing out the phial; then he carried it to Jonas, to ask him what the experiment was.

Jonas took the phial into his hands, and examined it.

"There, you see," said he, "there are some drops of water on the inside of the glass, and some on the outside. Now, put the cork in, and go and put the phial down in the sun. Then, in about an hour, go and look at it again. Now, if the warmth of the sun makes the water go all 'to nothing,' the glass will be dry, inside and out; but if the water all *goes away*, when it dries up, then the outside will dry, but the inside will not, for the water that is inside cannot get away."

"Yes," said Rollo, "that will prove it. I will go and put it in a good place."

Rollo accordingly put it in a corner of the yard where the sun shone very warm, and then went away to play. He did not think of the phial again until the next morning; and then, when he and Jonas went to look at it, they found that it was perfectly dry outside but inside there was a sort of dew upon the glass, and some drops of water in the bottom. So they considered it established that water, in drying up, did not go "all to nothing."

QUESTIONS,

What is the meaning of the expression, "promote evaporation"? What is it that Rollo's mother said did promote evaporation? Which can hold the greatest quantity of water, warm air or cold? When warm air has taken up all that it can, and afterwards becomes cold, what happens? Is true steam visible or invisible? Is not what is often called steam visible? How does it look? What does it really consist of? What proof did Rollo's mother offer that true steam was not visible? What would be some of the consequences if water did not possess the property of being dissolved by the air? What was Jonas's experiment? What did he intend to prove by it? Did it succeed to Rollo's satisfaction?

Address to Mothers.

BY REV. J. BRACE.

The semi-annual meeting of the New York City Maternal Association, was held in the lecture room of the Central Presbyterian Church, in New York, Nov. 6th. The children were addressed by Rev. Mr. Spaulding, Secretary of the Seaman's Friend Society, and the mothers, by Rev. J. Brace. The following imperfectly reported sketch of Mr. Brace's remarks, it is our pleasure to publish.

"There is a no more interesting spectacle," said Mr. B., "than a collection of mothers with their children. Here are young beings, and here, in a certain sense, are the authors of these beings. Had not the mothers lived, the children had not lived; and both,—all,—can never cease to live. On both, all,—immortality is impressed, and they will exist, when 'the Sun has closed his golden eye,'—exist for ever. No wonder that pious mothers are solicitous for the immortal welfare of their offspring. No wonder that they band together for this purpose, and form Maternal Associations. Parental responsibility justifies it; the worth of the soul justifies it. If one of these children, renewed by the spirit of God, and clad with the righteousness of Jesus, wears a crown

of glory and sweeps a harp of praise in heaven, that one will enjoy more happiness than the collective amount enjoyed by Adam's race from the creation until now; and if, on the other hand, one of them fails of eternal life, becomes a castaway, a prey to unquenchable fire, he will suffer more during the slowly moving cycles of eternity, than suffering man on this footstool of God, has yet been called to endure. If President Davis could say,—as he did, 'I tremble when I think of my future self;' the faithful mother may well tremble when she thinks of the destiny of her child. 'O, that Ishmael might live before thee,' supplanted Abraham, the father of believers; and a like aspiration will rise from every parent's heart, who appreciates in any due measure the spiritual interests of those whom God hath given him, and the infinite magnitude of those interests!"

After speaking of the *encouragements* to be faithful, arising from the commands of God and his numerous and explicit promises; the affectionate and peculiar regard for the young manifested by the Lord Jesus while on the earth, and the testimony of observation to the blessed results of parental fidelity; the lasting effects of youthful impressions; he proceeded to mention four things which entered into a Christian education, and which should never be lost sight of.

1. "*Cultivate in your children a spirit of habitual obedience.* 'Order is heaven's first law.' The moral governor of the universe, to keep the universe of mind in harmony, has found it necessary to promulgate laws, and attach to them a penalty. It is because these laws are obeyed, that *heaven* is what it is. In that realm of light and glory, Jehovah's will is supreme; and one common chain of obedience, linking spirits of the just, angels, cherubim and seraphim, together, binds them to the throne of the Almighty. It is because these laws are broken, that *earth* is what it is. On this planet there is sin and misery, simply because men have 'broken God's bonds asunder, and cast away his cords from them.' What Jehovah finds necessary, the heads of families will find necessary. There is the necessity of government; the exercise of parental authority; a domestic discipline, which insures obedience. Where this discipline is, is confidence, order, love; and where it is not, 'there is confusion and evil work.' The requisitions, indeed, must not be unscriptural or unreasonable, nor the severity of punishment excessive; but laws there must be, and a spirit of obedience to these laws habitually cherished. This is imitating God, and doing to our children, what he does to his creatures, and is thus in accordance with the dictates of divine wisdom and benevolence. 'A child left to himself bringeth his mother to shame,' and himself to ruin. Obedience tells happily not only upon the comfort, usefulness, and respectability of a child in the present life, but I hesitate not to say, that the obedient child is more likely to be a *converted* one. The principle of obedience within him to his parents, is more likely to make him obedient to his God. Having acknowledged *their* right to govern him, it is more easy and natural for him to acknowledge the right of God so to do. That command from the Lord—'my son, give me thine heart'—comes with very different force to the child taught invariably to obey, from what it does to the child whose will is ever his own. While it meets the first, predisposed to listen, with a sense implanted within him of inferiority to a higher power, with an idea and conviction of duty, it meets the other, wayward, intractable, ready to exclaim—'Who is the Lord that I should obey his voice?' and impiously to add, with a stout rebel of old, one who was never governed, 'I will not obey his voice.' This is too rarely considered; *the relation of parental authority to divine authority.* Obedience maintained in the family, is a course of moral training for the kingdom of God. Your children are to be accustomed to obey you; submit to wholesome and necessary restraints; subordinate their will to yours; not only that they may be now happy, now useful, now respected, but that they may acknowledge also the right of Him who made them, and bow to His authority.

2. "*Study the mental and moral peculiarities of your children.* Though children are in many respects alike, they are in some respects essentially unlike. It must be seen wherein they agree, and wherein they differ, and they must be treated accordingly. The same course of treatment will by no means answer for all; and it is because all are usually treated in the same way, because of the want of adaptedness in education to the peculiar temperament of each one, that members of the same family have turned out so differently. To prove the truth of this remark, it would be easy to adduce examples. President Edwards, the elder, and his wife, doubtless took as much care of their son Pierpont, as of their other children. He required indeed as much

care, and even more, and his peculiarities demanded *different* care. Had these peculiarities been carefully studied, and attention to him been directed accordingly, he had probably been a different man. It is the peculiar duty of mothers to discover these peculiarities of the young. They exhibit themselves early; and while incipient, in an embryo state, may be marked, calculated for, and receive a benign direction. While the mother is the first being that the child knows; and watches her eye, voice, smiles, and frowns, with intense interest; so the feelings, passions, and expressions of the little stranger, are open to the inspection of the mother. She can look and should look, discern the man in miniature, alter this or that feature which is unamiable, watch this and that propensity, and weaken it, or strengthen it, and so give a desirable cast to the character. The mother of our Lord appears, from a single remark of inspiration, to have done this. Though nothing is said of *Joseph's* attention to the early accents of the babe of Bethlehem, 'Mary,' we are told, 'kept all his sayings, and pondered them in her heart.' And did all mothers but anxiously inquire touching each one of their offspring,—'what manner of child shall this be?' and address themselves to moulding the intellect and heart aright, great and decisive changes in humanity would be produced, and the good done, be incalculable.

3. "*Exert a vigilant superintendency over the books which your children read, and the persons with whom they associate.* Caution in the selection of books for the young, has been ever needful, but never so much so, as in the times on which we have fallen. Never was the press so prolific. Over the length and breadth of our land, printed truths and errors, the virtues, vices, and follies of men, all the feelings which stir the human bosom, are scattered broadcast. And if there is much that is valuable, much that is in friendly alliance with inspiration, and 'ministers grace to the reader,' there is much which is frivolous, vicious, and false. Books are issues of the mind, and what drops from the tongue in an enduring form; and if an unruly tongue 'is set on fire of hell,' and 'sets on fire the course of nature,' much of our popular literature, the light-hearted utterance of perverted minds and depraved hearts, is a mighty engine in the hands of the prince of evil to corrupt and destroy. The virtuous Nicole branded the romance writers of France in his day as '*public poisoners.*' And not without reason. And yet these romances having done their work of death in infidel and licentious France, are now with kindred tales, novels, and songs, from Italy, Germany, and Spain, brought hither, to corrupt the principles, and destroy the morals of our children. They meet them in every fascinating form, and in almost every place. The greatest caution is necessary with respect to them. It is no trifling matter what books your children read. A single corrupt volume may work their ruin, as a simple piece of raiment may carry and communicate the plague. See to it that their reading is of a nature to furnish their minds, and to nourish those seeds of virtue and piety, which your own instruction has sown. And likewise select for them fit companions, for 'evil communications corrupt good manners,' and 'the companion of fools shall be destroyed.'

4. "*Pray with and for your children.* They require that to be done for them, which God alone can do, and which he will be asked by you to accomplish. He may not be expected to prosper your endeavours to do them good, unless these endeavours are made in humble dependence on his grace; and if they are thus made, you may confidently look for his blessing. He who 'hears the young ravens when they cry,' will not turn a deaf ear to the fervent, importunate cry of the believing mother for her offspring, but will send into her soul, and into the souls of her children, his renewing spirit. Bow the knee in your retirement for them. Remember them around the family altar. Take them apart by themselves, and invoke for them the favor of heaven. Teach them to pray. You may recollect the striking reply given by a pious mother (all of whose children were gathered within the enclosures of Zion, and were active and efficient members of the church of Christ), when asked, how it happened that every one of her boys and girls had thus secured 'the good part.' It was—

"While my children were infants on my lap, as I washed them, I raised my heart to God, that he would wash them in that blood which cleanseth from sin. As I clothed them in the morning I asked my Heavenly Father to clothe them with the robe of Christ's righteousness. As I provided them with food, I prayed that God would feed their souls with the bread of heaven, and give them to drink the water of life. When I have prepared them for the house of God, I have pleased that their bodies might be fit temples for the Holy Ghost to dwell in. When they left me

for the week-day school, I followed their infant footsteps with a prayer, that their path through life might be like that of the just, which shineth more and more unto the perfect day. And as I committed them to the rest of the night, the silent breathing of my soul has been, that their Heavenly Father would take them to his embrace, and fold them in his paternal arms.*

"This was the secret. She had power with God, and faithfully used that power. What you want, mothers, is to do the same; to have the spiritual and immortal interests of your children first in your thoughts, desires, and plans; to wrestle unceasingly with the Redeeming Angel for his blessing upon them!"

Said Mr. B. in conclusion, "Mothers, 'magnify your office.' Paul said he magnified his office, and so should you, yours. The maternal office has done, and is doing great things, and there is no danger of your estimating it too highly. You operate upon the infant and juvenile mind, and that influence is felt through the scenes of youth, the maturity of manhood, and in all the departments of life. You touch keys which may vibrate to the music of the upper temple, and swell the hallelujah chorus of ransomed beings. Who reared up for usefulness the prophet Samuel; the evangelist Timothy; that distinguished father of the church, St. Augustin, and the eminent Newton and Doddridge: and a 'cloud of witnesses,' who, having served their generation faithfully are now with Christ above, happy in the admiration of his glory, and the enjoyment of his friendship? Mothers! Feel then the dignity of your station; the vantage ground on which you stand, and act accordingly. And may God 'pour his spirit upon your seed, and his blessing upon your offspring.'"

AGRICULTURE.

The common view, which has been adopted respecting the *modus operandi* of humic acid, does not afford any explanation of the following phenomenon:—A very small quantity of humic acid dissolved in water gives it a yellow or brown colour. Hence, it would be supposed that a soil would be more fruitful in proportion as it was capable of giving this colour to water, that is, of yielding it humic acid. But it is very remarkable that plants do not thrive in such a soil, and that all manure must have lost this property before it can exercise a favourable influence upon their vegetation. Water from barren peat soils and marshy meadows, upon which few plants flourish, contains much of this humic acid; but all agriculturists and gardeners agree that the most suitable and best manure for plants is that which has completely lost the property of giving a colour to water.

The soluble substance, which gives to water a brown colour, is a product of the putrefaction of all animal and vegetable matters; its formation is an evidence that there is not oxygen sufficient to begin, or at least to complete the decay. The brown solutions containing this substance are decolorised in the air by absorbing oxygen, and a black coaly matter precipitates—the substance named "coal of humus." Now if a soil were impregnated with this matter, the effect on the roots of plants would be the same as that of entirely depriving the soil of oxygen; plants would be as little able to grow in such ground as they would if hydrated protoxide of iron were mixed with the soil. Indeed some barren soils have been found to owe their sterility to this very cause. The sulphate of protoxide of iron (copperas) which forms a constituent of these soils, possesses a powerful affinity for oxygen, and consequently prevents the absorption of that gas by the roots of plants in its vicinity.* All plants die in soils and water which contain no oxygen; absence of air acts exactly in the same manner as an excess of carbonic acid. Stagnant water on a marshy soil excludes air, but a renewal of water has the same effect as a renewal of air, because water contains it in solution. If the water is withdrawn from a marsh, free access is given to the air, and the marsh is changed into a fruitful meadow.

In a soil to which the air has no access, or at most but very little, the remains of animals and vegetables do not decay, for they can only do so when freely supplied with oxygen; but they undergo putrefaction, for which air is present in sufficient quantity. Putrefaction is known to be a most powerful deoxidising

process, the influence of which extends to all surrounding bodies, even to the roots and the plants themselves. All substances from which oxygen can be extracted yield it to putrefying bodies; yellow oxide of iron passes into the state of black oxide, sulphate of iron into sulphuret of iron, &c.

The frequent renewal of air by ploughing, and the preparation of the soil, especially its contact with alkaline metallic oxides, the ashes of brown coal, burnt lime or limestone, change the putrefaction of its organic constituents into a pure process of oxidation; and from the moment at which all the organic matter existing in a soil enters into a state of oxidation or decay, its fertility is increased. The oxygen is no longer employed for the conversion of the brown soluble matter into the insoluble coal of humus, but serves for the formation of carbonic acid. This change takes place very slowly, and in some instances the oxygen is completely excluded by it; and whenever this happens, the soil loses its fertility.

Humus supplies young plants with nourishment by the roots, until their leaves are matured sufficiently to act as exterior organs of nutrition; its quantity heightens the fertility of a soil by yielding more nourishment in this first period of growth, and consequently by increasing the number of organs of atmospheric nutrition. Those plants which receive their first food from the substance of their seeds, such as bulbous plants, could completely dispense with humus; its presence is useful only in so far as it increases and accelerates their development, but it is not necessary—indeed, an excess of it at the commencement of their growth is in a certain measure injurious.

The amount of food which young plants can take from the atmosphere in the form of carbonic acid and ammonia is limited; they cannot assimilate more than the air contains. Now, if the quantity of their stems, leaves, and branches has been increased by the excess of food yielded by the soil at the commencement of their development, they will require for the completion of their growth, and for the formation of their blossoms and fruits, more nourishment from the air than it can afford, and consequently they will not reach maturity. In many cases the nourishment afforded by the air under these circumstances suffices only to complete the formation of the leaves, stems, and branches. The same result then ensues as when ornamental plants are transplanted from the pots in which they have grown to larger ones, in which their roots are permitted to increase and multiply. All their nourishment is employed for the increase of their roots and leaves; they spring, as it is said, into an herb or weed, but do not blossom. When, on the contrary, we take away part of the branches, and of course their leaves with them, from dwarf trees, since we thus prevent the development of new branches, an excess of nutriment is artificially procured for the trees, and is employed by them in the increase of the blossoms and enlargement of the fruit. It is to effect this purpose that vines are pruned.

A new and peculiar process of vegetation ensues in all perennial plants, such as shrubs, fruit and forest trees, after the complete maturity of their fruit. The stem of annual plants at this period of their growth becomes woody, and their leaves change in colour. The leaves of trees and shrubs, on the contrary, remain in activity until the commencement of the winter. The formation of the layers of wood progresses, the wood becomes harder and more solid, but after August the leaves form no more wood: all the carbonic acid which the plants now absorb is employed for the production of nutritive matter for the following year: instead of woody fibre, starch is formed, and is diffused through every part of the plant by the autumnal sap. According to the observations of M. Hoyer, the starch thus deposited in the body of the tree can be recognised in its known form by the aid of a good microscope. The barks of several aspens and pine-trees contain so much of this substance, that it can be extracted from them as from potatoes by trituration with water. It exists also in the roots and other parts of perennial plants. A very early winter, or sudden change of temperature, prevents the formation of this provision for the following year; the wood, as in the case of the vine-stock, does not ripen, and its growth is in the next year very limited.

From the starch thus accumulated, sugar and gum are produced in the succeeding spring, while from the gum those constituents of the leaves and young sprouts which contain no nitrogen are in their turn formed. After potatoes have germinated, the quantity of starch in them is found diminished. The juice of the maple-tree ceases to be sweet from the loss of its sugar when its buds, blossoms, and leaves attain their maturity.

* The most obvious method of removing this salt from soils in which it may be contained is to manure the land with lime. The lime unites with the sulphuric acid and liberates the protoxide of iron, which absorbs oxygen with much rapidity, and is converted into the peroxide of iron. This conversion is accelerated by giving free access to the air, that is, by loosening the soil.

The branch of a willow, which contains a large quantity of granules of starch in every part of its woody substance, puts forth both roots and leaves in pure distilled rain-water; but in proportion as it grows, the starch disappears, it being evidently exhausted for the formation of the roots and leaves. In the course of these experiments, M. Heyer made the interesting observation, that such branches when placed in snow-water (which contains ammonia) produced roots three or four times longer than those which they formed in pure distilled water, and that this pure water remained clear, while the rain-water gradually acquired a yellow colour.

Upon the blossoming of the sugar-cane, likewise, part of the sugar disappears; and it has been ascertained, that the sugar does not accumulate in the beet-root until after the leaves are completely formed.

Much attention has recently been drawn to the fact that the produce of potatoes may be much increased by plucking off the blossoms from the plants producing them, a result quite consistent with theory. This important observation has been completely confirmed by M. Zeller, the director of the Agricultural Society at Darmstadt. In the year 1839, two fields of the same size, lying side by side and manured in the same manner, were planted with potatoes. When the plants had flowered, the blossoms were removed from those in one field, while those in the other field were left untouched. The former produced 47 bolls, the latter only 37 bolls.

These well-authenticated observations remove every doubt as to the part which sugar, starch, and gum play in the development of plants; and it ceases to be enigmatical, why these three substances exercise no influence on the growth or process of nutrition of a matured plant, when supplied to them as food.

The accumulation of starch in plants during the autumn has been compared, although certainly erroneously, to the fattening of hibernating animals before their winter sleep; but in these animals every vital function, except the process of respiration, is suspended, and they only require, like a lamp slowly burning, a substance rich in carbon and hydrogen to support the process of combustion in the lungs. On their awaking from their torpor in the spring, the fat has disappeared, but has not served as nourishment. It has not caused the least increase in any part of their body, neither has it changed the quality of any of their organs. With nutrition, properly so called, the fat in these animals has not the least connexion.

The annual plants form and collect their future nourishment in the same way as the perennial; they store it in their seeds in the form of vegetable albumen, starch and gum, which are used by the germs for the formation of their leaves and first radical fibres. The proper nutrition of the plants, their increase in size, begins after these organs are formed.

Every germ and every bud of a perennial plant is the engrafted embryo of a new individual, while the nutriment accumulated in the stem and roots, corresponds to the albumen of the seeds.

Nutritive matters are, correctly speaking, those substances which, when presented from without, are capable of sustaining the life and all the functions of an organism, by furnishing to the different parts of plants the materials for the production of their peculiar constituents.

In animals, the blood is the source of the material of the muscles and nerves; by one of its component parts, the blood supports the process of respiration, by others, the peculiar vital functions; every part of the body is supplied with nourishment by it, but its own production is a special function, without which we could not conceive life to continue. If we destroy the activity of the organs which produce it, or if we inject the blood of one animal into the veins of another, at all events, if we carry this beyond certain limits, death is the consequence.

If we could introduce into a tree woody fibre in a state of solution, it would be the same thing as placing a potato plant to vegetate in a paste of starch. The office of the leaves is to form starch, woody fibre, and sugar; consequently, if we convey these substances through the roots, the vital functions of the leaves must cease, and if the process of assimilation cannot take another form, the plant must die.

Other substances must be present in a plant, besides the starch, sugar and gum, if these are to take part in the development of the germ, leaves, and first radicle fibres. There is no doubt that a grain of wheat contains within itself the component parts of

the germ and of the radicle fibres, and, we must suppose, exactly in the proportion necessary for their formation. These component parts are starch and gluten; and it is evident that neither of them alone, but that both simultaneously assist in the formation of the root, for they both suffer changes under the action of air, moisture, and suitable temperature. The starch is converted into sugar, and the gluten also assumes a new form, and both acquire the capability of being dissolved in water, and of thus being conveyed to every part of the plant. Both the starch and the gum are completely consumed in the formation of the first part of the roots and leaves; an excess of either could not be used in the formation of leaves, or in any other way.—*Liebig.*

NEWS.

The Queen visited the city of London for the purpose of opening the New Royal Exchange. The ceremonies were magnificent and her Majesty was enthusiastically cheered.

Mr. O'Connell seems to have been losing ground in popular favor in consequence of his apparent leaning to "federalism" in preference to "repeal."

Americans have been excluded from the Clubs of London on account of the bad faith of several of the States of the Union in repudiating their debts.

Opposite the port of Liverpool, new docks are about being formed, on a scale so extensive, that the area of one of them will be equal to the whole dock accommodation of Liverpool; and a town is rapidly rising there, which a few years ago was a black and barren shore, that promises, not remotely, to outride in gigantic grandeur, the source from which it sprung.

The Anti-Corn-Law League is again in the field. It has been in a state of torpor during the last few months as regards its public meetings, but the leaders of the movement have been busy, it seems, in working the register, and taking the necessary steps for parliamentary strength, when the opportunity offers.

THE HAND-LOOM FACTORY WEAVERS.—At Glasgow there has been a serious dispute between the hand-loom factory weavers and their employers. The weavers generally demanded a rise of wages.

FATHER MATHEW INVOLVED IN DIFFICULTIES.—A public subscription has been commenced for the relief of Father Mathew, the apostle of temperance, who, by his liberality in support of the cause, has involved himself in great and ruinous pecuniary difficulties. Lord Cloncurry has contributed £50. It appears, from a paragraph in the *Cork Examiner*, that the Rev. Mr. Mathew has actually been arrested for debt. His debts are said to amount to £5,000.

The *Great Britain* steam ship was released from her long confinement on Saturday week, and got safe into the Cumberland Basin.

Mr. Arago has predicted that the impending winter is likely to prove the coldest known for many years.

FRANCE.—The *National de l'Ouest* complains that the English have seized the north point of Prince's Island, at the mouth of the Gaboon river, on the western coast of Africa, a site which belongs to the Portuguese—under the pretence of establishing a coal-depot for Atlantic steamers; and the journal assumes that the object is, to blockade the Gaboon, in case of a collision with the French, who have a factory on the banks of the river.

The Paris papers announce that France is taking steps to abolish negro-slavery in its colonies. The Governor of the Island of Bourbon, in opening the Colonial Council on the 29th of May last, made a similar statement. Into that Island, free labourers from China and the East Indies will be imported.

INDIA.—Calcutta Overland Mail arrived in London on the 31st October, with advices and papers from India to the 17th September, and from China to the 29th July. Every thing seems to augur well for the administration of his Excellency Sir Henry Hardinge. He has made no promises, but is quietly looking about, and had not taken any decisive step which denote his future policy. In the Punjab there are signs of discord, and in Scinde there have been some warlike operations. Capt. Mackenzie has had another brush with the Beloochees, and regained the laurels he had lost on a former occasion. Letters from Lahore of the 29th of August, state, that Goolab Singh still continued to hold out against the solicitations of his nephew for a reconciliation, and it was strongly reported that he had been joined by Meean Lab Singh.

It is well known that bread is made from the bark of pines in Sweden during famines.

CHINA.—We are sorry to learn by the Chinese papers that disturbances had again taken place at Canton. The English last year repaired the walls of the Company's garden, where they were in the habit of walking, playing at quits, and otherwise amusing themselves. On the 15th of July the Chinese endeavoured to force themselves into the garden, but were opposed. They threw brickbats, and broke down the gates, compelling the Englishmen to take refuge in a boat, in which they made their escape to the Consulate. On the following evening, a party of Chinese went armed with brickbats, and repeated their attempt, and being resisted, they commenced an attack upon all the foreigners who came within their reach. Several American gentlemen immediately armed themselves, and drove them from the front of the factories. Still continuing to throw brickbats, they were fired upon, and one man killed, and another wounded in the arm, which ended the affair for the day. The English and American Consuls applied to the Chinese authorities for a sufficient force to protect the factories, and a message was sent to the American man of war at the Bogue, to request assistance. Intelligence of the 21st informs us, that no further rioting had taken place, nor was any likely to occur at present, though it was quite certain that the authorities at Canton were either unable or unwilling to adopt measures sufficiently vigorous to check the riotous disposition of the community.

PORTUGAL.—Lisbon letters, of the 16th October, narrate the proceedings in the Cortes. The Committees appointed to inquire into the conduct of Government during the late troubles had made a favourable report, and had recommended a bill of indemnity. A bill introduced into the Chamber of Peers for the abolition of slavery in the Portuguese possessions in Asia, by the Count de Lavradin and the Viscount Sa de Bandeira, was opposed by Ministers, and rejected by a majority of 23 votes against 18.

ALGIERS.—The accounts from this country give the details of a most sanguinary conflict between a party of Kabyles and the French, in which the former lost 600 men, and the latter between 50 and 60, with 150 wounded. The French were commanded by General Comman. The scene of the fight was a mountain fastness, where the Arabs fought desperately, and the French, owing to falling short of ammunition, were obliged to retreat into the plain. New disasters commenced in their retreat. Marshal Bugcaud was about proceeding thither with 5000 men. Algiers is to be erected into a Vice-Royalty, with one of Louis Philip's sons for Vice-Roy.

The Democratic party in the United States have carried the presidential election. James K. Polk was their candidate for President. The distinguishing features of their policy are free trade and the immediate annexation of Texas.

The Provincial Parliament assembled on the 23th November, in this city, when the lower house elected Sir Allan M'Nab as Speaker, by a majority of 39 to 36. The Governor's Speech, recommended attention to Education, Lunatic Asylums, Roads and other good objects, and states that the Revenue is in a flourishing condition.

This city has been in a very excited state for some time, growing out of the struggles of political parties, at the parliamentary and Municipal elections. It is melancholy to add, that two lives at least have been lost, besides many individuals more or less injured.

PROVINCIAL PARLIAMENT.—Since the opening of Parliament there has been no business transacted except of a routine character, chiefly of notices of motions. We subjoin the most important.

By Mr. Price—Of an Address for a full account of the affairs of King's College, and whether a Chaplain has been appointed to the University, &c.

By Mr. M'Donell, of Stormont—Of a Bill to extend the provisions of the Act providing for the disposal of the public lands, and to enable persons located prior to 4th April, 1839, to perfect their titles.

By Mr. Christie—Of an enquiry whether the Government intend taking any measures for the suppression of the secret societies that appear to be organized, and in action, in this city, to the disturbance of the public peace and endangerment of the lives of Her Majesty's subjects.

By Mr. DeBleury—Of a Bill to afford further relief to insolvent debtors; and a Bill to repeal the Act establishing Free Schools in Lower Canada.

By Mr. Cameron—Of a Bill to continue and further extend the encouragement heretofore given to agricultural Societies.

By Mr. Robinson—Of an enquiry of the members of the administration, why the sum of £3,000 granted for the improvement of the road from Lake Ontario to Lake Huron, has not been expended according to the intention of the Legislature.

By Mr. Gowan—Of an enquiry under what authority vessels navigating the St. Lawrence from one Canadian Port to another are compelled to report and receive a clearance at Coteau du Lac, and whether the Government will take measures for the removal of such an obstruction to our inland commerce.

By Mr. Roblin—Of a Bill to provide for the more equal distribution of the property of persons dying intestate in Upper Canada.

By Mr. Christie—Of an Address for copies of any correspondence with the Home Government relative to the Civil Lists, and of any Reports of the Executive Council on the subject.

Mr. Christie.—Presented a Bill to provide a legal recourse to persons having claims against the Executive Government, and to enable Her Majesty more effectually to do justice in such cases.

Also, a Bill for regulating the fees on marriage licenses, and providing for the payment of the same into the provincial treasury.

MONTREAL PRICES CURRENT.—Dec. 2.

| | | | |
|--------------------------------|-------------------|------------------------|------------|
| ASHES—Pot | 22s 6d | BEEF—P. Mess tierce | \$9 a \$10 |
| | Pearl | Do ibls | \$6 |
| FLOUR—Fine | 24s a 26s | Prime | \$4 1/2 |
| WHEAT | 4s 9d | TALLOW | 5 1/2 |
| PEASE 2s 6d a 2s 9d per minor. | | BUTTER—Salt | 6d a 7d |
| OAT-MEAL | 8s 0d per. cwt. | CHEESE | 3d a 5 1/2 |
| PORK—Mess | \$13 1/2 | EXCHANGE—London 2prem. | |
| | P. Mess | N. York | 2 |
| | Prime | Canada W. | par |
| LARD | 4d a 5d p. lb | | |

Beef, Pork and Butter have improved in the British market. All kinds of grain have advanced a little.

Monies Received on Account of

Advocate.—Military Temperance Society, Isle-Auxnoix, 8s 9d; Sundries J. C. Becket, Montreal 9s 2d; A. M'Donald, Bytown 1s 6d; Rev. Mr. Cairns, Metis 2s 6d; R. L. Johnston, Palermo 1s 8; Sundries Montreal 6s 8d, Donations.—S. Mathewson, £1 5s 0d; N. Shaw, £0 10s 0d; D. Torrance, £5 0s 0d; J. W. £1 5s 0; E. Atwater, £1 5s 0d; T. J. Greene £1 5s 0; M. Whiteford, £2 10s 0d; A. Adams, £1 5s 0d; G. Hagar, £1 0s 0d; Miss——, Howard per R. Raston 12s 10d.

EARLY SHOP SHUTTING.

THE PUBLIC are respectfully informed, that on and after the FIFTEENTH instant, (Friday next,) the RETAIL DRY GOODS ESTABLISHMENTS in this city, will be CLOSED at SEVEN o'clock, P. M., so to continue until the 15th March. Montreal, Nov. 11, 1844.

FOR SALE,

FOUR Tons very Superior American CHEESE.

DWIGHT P. JAMES.

Corner of St. Paul and M'Gill Streets.

Montreal, Oct 15, 1844.

THOMAS C. ORR,

GENERAL AGENT, SHIP AND INSURANCE BROKER,
No. 20 St. Enoch Square,
GLASGOW,

OFFERS his services for the receiving and Shipping of Goods to Canada, and for the Sale of Produce.

THOMAS C. ORR will be happy also to engage Passages by first class vessels, for persons coming to Canada. And those desirous to bring out their friends can purchase Drafts for that purpose from Mr. JAMES R. ORR, of Montreal, who will give all information, if by letter, post-paid.

November 1, 1844.