

Agriculture.

Rust or Mildew in Wheat.

From a prize essay "on the culture, enemies and diseases, and casualties of wheat," read before the Kentucky State Agricultural Society, by Theodore Brown, of Jefferson Co., we take the following upon this subject:

In the economy of Providence, a system of parasites seems well nigh to pervade all nature. Man has parasites in the idle and vicious members of society, who are sustained by the provident. The lower order of animals also, one and all, beast and bird, fish, reptile and insect, are alike infested by them—some on the skin, some in the stomach or bowels, and fishes even on the tongue and gills—and whenever these parasites multiply greatly, disease or death to their victims ensues. Plants, too, in analogy herewith, have parasites. Among those with which we are familiar may be mentioned the mistletoe on trees, ergot in rye, and smut and rust in wheat. Botanists are unanimous in assigning this nature to rust, and nearly so as regards smut. Person calls it "Puccinea graminis." We are told that it exists in our wheat fields every year, and only awaits a warm, wet season and other favorable circumstances to exhibit it to our terror. The seed of the puccinea, which was left the preceding year, on stubble, and from thence attaching itself to grass, had multiplied about fence rows, is not destroyed by the cold of winter, and is in readiness the next summer, when borne by the winds, to plant its roots in the wounds made in the leaves and stalks of wheat by the bursting of the surfeited and tender sap vessels. It is likely, also, that the exuded sap helps to make it stick, till it gains a firm foothold, when it appropriates the sap in its ascent to the head, and causes the grains to shrivel from starvation.

White Wheat, with its tender fast-growing stalk, is especially liable to this disease, while May Wheat, from its state of advancement when rust appears, and from its silicious stalk, has too much hardness and strength in the covering to the sap vessels, to allow them to burst so easily. For a similar reason, the growth of moist rich bottoms, is more susceptible to rust than that of high dry uplands. Drill culture, as before mentioned, is said to have a beneficial effect as a remedy. Lands lying on seashores, where the atmosphere is impregnated with salt, are said to be free from attacks of rust. In Johnson's Essay on Salt, some experiments of Mr. Cartwright are given, showing the effects of brine in checking this disease. It was mixed in the proportion of one pound of salt to one gallon of water, and sprinkled with a plasterer's brush, by a man passing through the rusted wheat, with a pail filled with the mixture. One man can go over 4 acres a day, if the brine be prepared by another. In 48 hours the effect was manifest. It is best to apply it in cloudy weather, or late in the evening, to prevent evaporation; but if it be washed off by rains, it must be repeated. Early cutting is the cheaper and simpler remedy when it can be done in time, but some seasons the rust strikes the wheat so early in the milk state, that it might not be safe to cut it, and then sprinkling might be advantageously practiced.

How to cure Fruit-stealers.

One great hinderance to fruit growing in the neighborhood of towns, and one of the greatest hinderances to perseverance in its culture, is its exposure to be stolen. One may send to a distant nursery for a rare and expensive kind of fruit, may watch over and nurse it for several years, and then, when his eyes are gladdened by its first productions, some ragged loafer may enter his grounds by night and devour them. Nay, some loafers, not ragged, but professedly genteel, may rob him of his treasures, and then chuckle over their success as a first-rate joke.

Why should not our Legislature give us a law punishing fruit-robbing with heavy penalties? Better that a thief enter our barns and carry off oats or corn, than enter our gardens and strip our pear-trees and grape-vines of their delicious burden. We wish, too, that public sentiment visited the robbery with greater reprobation and disgrace. But until such a good time comes, every man must guard his own castle in the best way he can. A neighbor of ours treats his pilfering visitors to a dose they don't relish. For example. When his early Sweet Bough apples are being nightly stolen, he takes several fine specimens and immerses them in a weak solution of ipecacuanha, and scatters them again on the ground; first making them so that his own family shall not eat them by mistake. He treats a few of the outside hills of his strawberry patch in the same way. It affords him no little amusement to learn, privately, that the does take effect where they were designed to do so, his father (a doctor) being soon sent for by suspected persons to prescribe for their disordered stomachs and unaccountable nausea! This gentleman's fruit-garden lies on the bank of a canal, and the indigestibility of his fruit is well known to the canal-drivers all along the route!—*Rural American.*

The leaves of rhubarb make excellent greens.

Temperance.

The Law in Maine.

We have received information from Canada which makes it very apparent that the reckless falsehoods that have been put forth in one, if not two, of the papers here, in relation to the liquor traffic in this city, are at the instance of the enemies of Temperance in that province, and to help them. These sinners, especially about Parliament, are sorely pressed just at this time, and any thing that looks like a failure here is a great comfort to them, no matter whether it is truth or falsehood. The one is just as greedily seized on as the other, and their eyes are shut against all light that may be shed on any statements disparaging the working of the law here. They seem to be entirely oblivious to the fact that, despite the stringent prohibitory law all over the civilized world against theft, robbery, murder, and other crimes, these crimes still continue to exist. They demand that the law shall do that for the liquor traffic which it has never done with reference to any other crime. They are not willing to judge of it as they do of other laws. They insist it shall annihilate the liquor traffic, or be wiped from the statute books as a useless encumbrance. Let them take the same course with reference to all law, civil and criminal, and such a thing as law would not exist; for there is no law which perfectly answers its purpose. Every law is evaded, or set at defiance, openly or secretly, by bad men. The truth is, it is enough that the liquor law answers its purpose as well as other criminal laws. If it does this, it does all we have any right to expect. That it does this, in this city and State, we believe, notwithstanding the falsehood of enemies and the croaking of some friends. Of this our friends abroad may rest assured. The law here is a success, and cannot be wiped out. It is feared by rumsellers, and hated by graceless politicians; but they must stand it, for the people are behind it.—*Maine Temperance Journal.*

Four thousand Dram Shops closed.

TRIUMPH OF MORALS IN NEW YORK.—We record with great satisfaction the prompt and vigorous movements of the police for the suppression of the infamous Sunday liquor traffic. In accordance with the petition of the memorialists on the subject, and with the universal demand of the press and the public, our authorities have laid their hand on this fountain of wickedness, and last Sabbath witnessed what we had almost despaired of ever seeing here—a quiet, sober, peaceful day. The patrolmen were instructed from head-quarters to notify every dram-shop keeper that there must be closed doors on the Sabbath, or a complaint would be lodged with the district attorney, and prosecuted to conviction. A very large proportion of the liquor dealers took the hint, and those who resisted or openly evaded the law were complained of. The lager-beer theatres generally abandoned their plays, musical entertainments, and gambling, but kept on their sales. As a beginning, however, the movement was unexpectedly successful, and our police authorities must share with the citizens in the feeling of satisfaction at the result.

The effect on the moral condition of the city was immediate. The arrests from drunkenness and crime were comparatively few; and the papers state that these few were mainly of intoxicated excursionists, who had procured drink in other places. When the reform is complete, as we trust it soon will be, there cannot be a doubt that a new phase will be seen in the statistics of pauperism and crime. We shall take another occasion to comment on the history and results of this important movement. Meanwhile we quote the closing paragraph of an article in the *Express*:—"This excellent beginning is the direct result of the efforts of the Sabbath Committee. They have been unwearied in their exertions to procure an observance of the Sunday Laws, and with Temperance men, to procure the punishment of those who violate the most stringent provisions of these laws. The successful litigation that has been carried on against the Sunday liquor sellers during the past week has also had a very salutary effect; and should the court of last resort sustain the action of the Court of Common Pleas—of which there can hardly be a doubt—the result will be the practical abolition of Sunday liquor selling in this city. We trust that the gentlemen who so far have succeeded will persevere in their good work until the end. A long and patient continuance in well-doing cannot fail to bring its own reward."—*New York Observer, June 23.*

Correspondence.

For the Christian Messenger.

Who planned the fifth door?

MR. EDITOR,

In former times there were but four doors to visible Christian churches, (Christ himself, of course, being the only door to the invisible church.)—there was the front door of ADMISION, with its double folds, by *Baptism* and by *Letter*—there was the right-side door of DISMISSION to sister churches—the left-side door of EXCLUSION for persevering offenders—and the great hall door of DEATH, which leads the righteous up to the celestial mansions. The keys to open and shut all those doors (the last excepted) are delivered alike by Christ to the members of every gospel church. But I find, by the Minutes of our Associations, that, between the years 1837 and 1841, there was introduced into our Baptist Church polity, besides the doors thus established by the Divine head of the Church, another door constructed of very questionable shape: it is a sort of trap-door, called REMOVED, through which missing members are silently dropped into the ungodly world. I have not the Minutes of 1838-39 and '40, but, in the Minutes of 1841, I find the trap-door is grating on its hinges—from 1841 to 1850, inclusive, when the Association was divided. I have the Minutes of six years, which show an average of 29 per year; thus we have 200, the number who had dropped through this trap-door in these ten years. From 1851 to 1859, inclusive, (averaging the year 1855, when the number is not given,) I find that 375 dropped through in these nine years in the Western Association alone. By allowing the same number (375) for the Central and Eastern Associations, combined, we have the number 750 for the last nine years, to which add 200 for the ten years previous, and we have 1040, who have dropped through this new door in Nova Scotia. This is certainly a more economical and expeditious mode of doing business, and better adapted to this Railroad-Telegraph-Balloon-age in which we live, than the old foggy method of appointing committees to hunt up missing members—write to them, and labor to induce them to take letters of dismission and unite with other churches of like faith and order with their own. And if they could be thus saved, whether it would pay for the cost of the trouble or not, we may easily know which would be most like "watching for souls."

I have never been able to ascertain where or by whom this trap-door was constructed. Some say in Nova Scotia, others say in "the land of notions," and others, again, say in Pandemonium. Would it not be well to make enquiry, and find out the person, that there may be a monument erected to his memory?

BAPTIST.

For the Christian Messenger.

Notes of a Trip.

DEAR BROTHER,

Perhaps a few notes of a recent trip will be acceptable to some of your readers.

I left home on the 27th of July, and reached Boston on the evening of the 29th. Next day I had a pleasant interview with Dr. Warren, at the Missionary Rooms. On Lord's-day the 31st, I heard two good sermons in Dr. Neale's church. The preacher was a minister from the country, with whom Dr. N. had exchanged. In the afternoon I heard a second sermon, by a coloured young man, who occupied Mr. Kallöch's pulpit in the Tremont Temple, and addressed a crowded congregation with much fluency and self-possession. He had great command of words; time and study will furnish him with thoughts.

On the 1st inst. I went to New York. I was glad to leave that noisy city on the next day. During my short visit I was introduced to Dr. Bright of the *Examiner*, and to Dr. Armitage and other brethren at the office of the American Bible Union.

Two days were spent at Springfield, where I attended the meeting of the American Association for the advancement of Science. On my way to that place my attention was arrested by the loud and earnest conversation of a gentleman, whose voice was often heard above the rattling of the railway train, and who was evidently labouring hard to instruct or convince a younger man who sat by his side. He proved to be a red-hot spiritualist, and an infidel. His zeal was very noticeable. He embraced every opportunity of getting into conversation with other gentlemen, and communicating his sentiments, and even made an effort (happily without success) to bring the subject before the Association. If the lovers of truth were as active and persevering as some partisans of error, the

aspect of the good cause would be brighter in many parts of the world.

Some profound papers, and some of general interest, were read at the meetings of the Association. Principal Dawson's Essay on the Carboniferous Flora, illustrating the vegetable origin of coal, was received with much applause. Though necessarily abounding in technical terms, there was so much light and life thrown into it, that even non-scientific hearers were charmed. It was the gem of the meeting.

Regretting that I could not remain during the entire session of the Association, I left Springfield on the 5th, and proceeded to Montreal, where I remained till the 16th. The progress of improvement in that city is very rapid. New buildings are rising up in every direction—warehouses, stores, private residences—all of brick or stone, mostly the latter, wooden erections being prohibited. They are occupied as fast as they are raised, and rents are high.

The works at Victoria Bridge are pushed forward with great vigour. It is hoped that the entire structure will be finished in November next. Your readers are probably aware that it is a tubular iron bridge, that is, a series of iron tubes, connected together, and resting on twenty-four massive stone piers, so constructed as to prevent any injury likely to arise from the breaking up of the ice in the spring of the year. The space between each pier is 242 feet, except the centre span, which is 330 feet. I walked through eight of the tubes, on the city side. A locomotive passed at the time, with a load of materials for the works, enabling one to judge of the effects of the passage of a railway train. The solidity of the structure, the ingenuity of the contrivances for securing strength, and the efficient manner in which the work is carried on, command universal admiration. The bridge, including the approaches, is nearly two miles long. The first stone of the last pier was laid on Saturday the 13th inst., on which occasion General Williams and a number of ladies and Gentlemen descended into the coffer-dam, and assisted at the ceremony, at a depth of thirty feet below the bed of the river, it being found necessary to excavate to that depth in order to reach the solid rock on which the piers rest.

I am happy to inform you that the Baptist Church in St. Helen street, Montreal, enjoys the ministry of the Rev. John Goadby, formerly a missionary in Orissa, afterwards a United States pastor. Mr. G's varied knowledge, sound discretion, and attractive pulpit talents (attractive to thinkers, who will not be satisfied with the mere flashy,) render him a very valuable acquisition, and will doubtless, by God's blessing, produce good results. If all the Baptists in Montreal would unite together, our Denomination would soon become strong. But Baptist principles must be either imperfectly understood or sadly undervalued, when those who profess them worship regularly with Congregationalists or Plymouth brethren.

Nova Scotia has laid Montreal under obligation. She gave McGill College its Principal—Dr. Dawson. The largest bookselling establishment in the city is owned by Mr. Benjamin Dawson, also from Nova Scotia. And Mr. Doane, whose photograph portraits are everywhere admired is a Nova Scotian—a native of Barrington. Everybody knows that General Williams, the Commander of the Forces, is one of ours. More next week.

Yours truly,

August 31, 1859.

J. M. C.

For the Christian Messenger.

Bible Union.

A letter from W. H. Wyckoff informs us that "The close of the financial year is approaching. In our last Quarterly we spoke of the receipts as meeting expenditures, and of the prospect that the year would result more favorably than the last, so far as the treasury was concerned. We still believe that such will be the case; but, in order that our faith may be justified by facts, a general, cordial effort, on the part of the friends of pure versions, is indispensable. The last two months have not brought in so much as was anticipated. There is still time, however, for every one who feels interested in our objects, to aid effectually.

"Selfishness is not a characteristic of the supporters of the Bible Union. They have often proved themselves willing, and generous, and liberal. An opportunity is again afforded to evince the same disposition, and the occasion is worthy. Our work is satisfactorily advancing, and the prospect of completion is most encouraging.

"We invite you, if you can do it conveniently, to attend the next Anniversary. It is appointed for Wednesday and Thursday, 5th and 6th of October.

"We shall be much disappointed, if we do not have, as has always been the case at the meetings of the Bible Union, a season of harmonious counsels, and united action, of pure, spiritual sentiment, and almost enthusiastic zeal and devotion."