

Science and Art.

The Wonders of the Microscope.

The recent astonishing discoveries of Ehrenberg, a Prussian naturalist, have given a new aspect to this department of animated nature, even in a geological point of view. He has described seven hundred and twenty-two living species, which swarm almost everywhere, even in the fluids of living and healthy animals, in countless numbers. Formerly they were thought to be the most simple of all animals in their organization; to be, in fact, little more than mere particles of matter endowed with vitality; but he has discovered in them mouths, teeth, stomachs, muscles, nerves, glands, eyes, and organs of reproduction. Some of the smallest animalculæ are not more than the twenty-four thousandth of an inch in diameter, and the thickness of the skin of their stomachs not more than the fifty-millionth part of an inch. In their mode of reproduction they are viviparous, oviparous, and gemmiparous. An individual of the *Hydatina senta* increased in ten days to one million; on the eleventh day to four millions, and on the twelfth day to sixteen millions. In another case Ehrenberg says that one individual is capable of becoming in four days one hundred and seventy billions! Lauehoeck calculated that one billion animalculæ, such as occur in common water, would not altogether make a mass so large as a grain of sand. Ehrenberg estimates that five hundred millions of them do actually sometimes exist in a single drop of water. In the Alps there is sometimes found a snow of red color; and it has been recently ascertained by M. Shuttleworth that the coloring matter is composed chiefly of infusoria, with some plants of the tribe of Algae. And what is most singular is, that when the snow has been melted for a short time, so as to become a little warmer than the freezing points, the animals die, because they cannot bear so much heat! A specimen of meteoric paper which fell from the sky in Courland, 1696, has been examined by Ehrenberg, and found to consist, like the red snow, of conferva and infusoria. Of the latter he has found twenty-nine species. Surprising as these facts are, it will perhaps seem still more incredible that the skeletons of these animals should be found in a fossil state, and actually constitute nearly the whole mass of soils and rocks, several feet in thickness, and extending over areas of many acres. Yet this too has been ascertained by the same acute Prussian naturalist.

Forging by means of Photography.

A curious circumstance has happened, which says the Paris correspondent of the *Atlas*, may be just as alarming to you as it proved to us. The science of photography has for some time past been the rage amongst the young men of fashion in Paris, and has been carried to a great perfection by many of them, but by none to a greater extent than by M. Aguado, whose successful studies from nature are well known among the artists of every country. On Saturday morning this gentleman sent word to the experts of the Bank of France that he had at length succeeded so fully in the imitation of one of the thousand franc notes that he defied them to detect it, and to show his perfect conviction of the impossibility of discovery he warned them the note would be presented at the bank between the hours of one and three. According to the intimation, the whole of the experts were assembled at the caissie, and each note brought in was submitted to their examination before it was accepted. The hours passed by, and no false note had appeared; the whole of those presented during the interval specified lay in a row spread out before the experts, who already crowded over the idea that M. Aguado had not dared to hazard the experiment, when just as the clock struck three, in he walked, smiling and triumphant, with a thousand franc note in his hand. "Well, have you detected my forgery?" said he, with the greatest coolness. "No," replied the head expert, laughing, "for a good reason—you never sent it." "Why, there it lies right under your nose—the third to the left, and here is the original I took it from." The dismay of the experts may be conceived, when even upon comparing the two they found it impossible to say which was the genuine note and which the false. A committee was held to determine upon the course to be adopted; and the bank has already accepted the offer of a learned English doctor resident here to furnish a chemical preparation of his own discovery which shall immediately decompose the photograph by the touch of a camel's hair brush dipped in the liquid and

passed lightly over the printed lines. The adventure has served to make us laugh, although rather grimly, when it is considered that already the greater proportion of the notes now in circulation may not be able to withstand the test of the learned doctor's brush.

A NEW MOTIVE POWER, combining the forces of air and water, is said to have been brought into operation by an ingenious young mechanic at Nottingham.

Correspondence.

For the Christian Messenger.

Donation Visit.

It is certainly gratifying to the pastor of a church to receive from his people in addition to his stated salary, now and then, what is called a Donation visit, not only because it enables him to replenish his library, and provide other things necessary for his work as well as to indulge in acts of benevolence; but because he is thereby convinced that his labours are appreciated and the bond of union between him and his people is thereby greatly strengthened. But when the poor roving missionary, who has no stated salary or congregation, receives a Donation visit, he must feel it to be more immediately, a gift from God, and perhaps is led in a greater degree to adopt the language of the Psalmist, and say, "The Lord is my shepherd." The writer has been travelling for nearly two years, and most of the time has had to look to the providence of God for remuneration, and can still say, "The Lord is my shepherd, I shall not want."

I desire hereby gratefully to acknowledge a freewill offering from about fifty of my friends, from different localities, who assembled at my humble dwelling, on Wednesday, the 15th Oct. They presented in cash and various useful articles to the value of nearly fourteen pounds. The divine blessing was implored by Rev. C. Tupper, and the company cheerfully partook of the good things prepared by the ladies. Rev. C. Tupper was chosen Chairman. An address with the above mentioned donation, in behalf of the company, was presented by an esteemed brother in Christ, to which the writer replied. The meeting was then addressed by Rev. A. Stronach, Brother Mosher, and the Chairman. After prayer the benediction was pronounced by Rev. C. Tupper. The company then dispersed, no doubt to experience that it is more blessed to give than to receive. Such exhibitions of sympathy are calculated to encourage the heart of the missionary, to add comforts to his family, and we trust to please God, which is best of all. Hoping similar blessings may be imparted to others.

I am yours, in the hope of Eternal Life,

ROBERT S. MORTON.

For the Christian Messenger.

Naming a District in Aylesford.

At a Meeting previously notified, held in the School-house, near Mr. Gilbert R. Chute's, Lower Aylesford, on the 20th inst., for the purpose of naming the District, Rev. C. Tupper was appointed Chairman, and Mr. G. R. Chute, Secretary, when the following Resolutions were passed:—

1. That the boundaries of the District be as follows: Commencing at the Bridge which crosses the Fales River, near Kingston Village, proceeding westerly by the south side of the Road to the county line; thence following said line southerly to the Fales River, and thence following said River down to place of commencement.
2. That this District be henceforth designated "TREMONT."
3. That the Minutes of this Meeting be furnished for insertion in the Christian Messenger.

C. TUPPER, Chairman.

G. R. CHUTE, Secretary.

Tremont, Aylesford, Oct. 25th, 1856.

For the Christian Messenger.

Correction.

MR. EDITOR,

While looking over the Christian Messenger of October 22nd, I noticed the death of a man by the name of Kaulback, who committed suicide, at St. Margaret's Bay. The deceased alluded to was not of St. Margaret's Bay, but of Lunenburg. I wish the mistake to be rectified in the Christian Messenger.

Yours truly,
JOHN COVEY.

St. Margaret's Bay, Oct. 30th, '56.

[The two or three lines giving the piece of news above referred to were taken from one of the morning papers and credited accordingly. We are much obliged to Mr. Covey for the correction.]

For the Christian Messenger.

MIC-MAC MISSION.

[Reports of the operations of benevolent Societies are often considered merely a necessary part of the annual meeting and are read by the Secretary, printed, and then put aside simply as a piece of past history. Such however should not be the case. The facts and statements in the following Report read at the Annual Meeting of the Mic-mac Missionary Society, on Monday the 23rd inst., will interest the hearts of many and shew them that there are grounds for hope that God will bless efforts to convey the gospel to the heathen in these Provinces as well as in distant lands.]

ANNUAL REPORT.

THE COMMITTEE OF THE MIC-MAC MISSION are happy in being able to report a degree of prosperity during the past year. The mission has not indeed been remarkably abundant in outward fruits; and yet it has evidently been advancing towards maturity. It is becoming strengthened in its interests, and it is beginning to assume a more definite and promising character than heretofore.

First, with regard to the establishment at Mount Micmac. The industrial department has not been resumed. It was sustained sufficiently long to demonstrate that the Indians are capable of being employed in industrial pursuits, when for want of accommodations they were obliged to disperse. The committee in a resolution published in the last year's report, directed, that in future, employment should only be afforded to those Indians who would consent to send their children to school. There is no doubt that such families could be found and brought to Hantsport. But a considerable amount of Indian work remaining still undisposed of, and the sum of £200 being needed to pay the balance due on the land, besides the ordinary expenses; no attempt has been made to establish a school during the past year. It is however still the intention of the Society so soon as arrangements can be made, to establish the mission on a permanent basis. For this purpose a tract of land containing 450 acres, near Hantsport, in a position central both to Nova Scotia and New Brunswick, contiguous to extensive hunting and fishing grounds, and fit for cultivation, has been purchased. Some delay has occurred in the final arrangements for securing the title. It will probably be all arranged in a few days.

In the second place, your committee would refer to the labours of the missionary. We rejoice that his health is mercifully spared to continue the good work for which he seems eminently qualified. A part of his time, during the past year, has been spent in collecting monies to support the mission and to pay for the land. For this purpose he has visited, with success, various counties in both provinces, in the direction of Pictou, Liverpool, Fredericton and Miramichi. In these tours his object was kindly promoted by Christians of every name. But the collection of money, however important, has been regarded by the missionary as only of secondary moment. He has made it his chief employment to visit the Indians in different places and to labour for their spiritual good. He has neglected no opportunity of reading and expounding the scriptures,—in this way "preaching publicly and from house to house" in the various Indian encampments, by the way side, in their villages, their wigwams, at the houses of the white people, and wherever they were to be found. He has also distributed various portions of scripture and tracts to those who can read. In this way he has distributed copies of the printed gospels and of the Mic-mac spelling book, which were often received with great eagerness. Copies previously distributed were found carefully preserved and read, though they have sometimes been destroyed.

Mr. Rand has also, even in his travels, prosecuted the study of the Indian language, and the work of translation. During the past winter the latter half of the book of Psalms was translated, completing the book; and the books of Genesis and Luke were revised. The gospel of Luke was copied for the press; the last proof-sheets have been corrected, and sent to the printer in Bath, England, and will soon be issued. He has begun to copy Genesis for the press. In his late tour to Fredericton the missionary visited settlements of the Maliseet Indians, and translated into their language one of the Mic-mac Tracts; and a portion of the Psalms. The language of this tribe being similar to that of the Penobscots, the benefit conferred upon the former will also be available to the latter. Both the Maliseet and the Penobscot tribes can read their language in the script character. Thus the word of God may

be conveyed to them also through the medium of the press, and the influence of the mission may be felt beyond the sphere of our more immediate operations. "They shall come out of every nation and kindred and tongue."

The committee would not close their report without referring thirdly, to the state of the Indians.

The Micmacs in the three Provinces number, so far as can be ascertained, about 2000. Micmacs are to be found also in Canada. They perform pilgrimages from these provinces to the great cathedral in the city of Montreal, expecting thereby to procure salvation. Who would not rejoice in turning their minds from these lying vanities to the true Saviour, in freeing them from a ruinous superstition, and bringing them under the influence of genuine piety? They usually receive the missionary with great cordiality not only on account of their remarkable hospitality to strangers, but from their strong religious character, and the deep interest they feel in the glorious truths of the gospel. Many of them will not be persuaded by the Romish Priests that the bible is a bad book after they have heard it read in their own language. With eager interest do they gather round the missionary in their wigwams and listen to the word of life as read and expounded by him. A few of them can read and are becoming acquainted with the literature which has been supplied for them in their own tongue. They now possess in Micmac—the gospels of Matthew and John, together with a couple of tracts, and a spelling book. And many are awaking to the necessity of education for their children. Instances of bitter hostility to our missionary and his mission do sometimes occur, but they are few and far between. On the other hand they often regard with great favor, the work of transferring the scriptures into their own language. Our missionary in his letters from New Brunswick, makes honourable mention of individuals who aided him there in his work, despite all attempts to prevent them.

But the committee would mention particularly the case of Benjamin Christmas, who was referred to in the last year's report, as rendering valuable assistance to our missionary, in the work of translating, and who was desirous of removing to Hantsport with his family. A proposal was made to him to that effect, which was accepted and about the 12th of Dec. he arrived with his family from Cape Breton. This family consisting of a wife and three children, have adopted the costume and customs of the whites, have ever since their arrival resided in a house, and have no wish to return to the wanderings and wretchedness of Indian life. The wife is quite an adept in house keeping, and has learned to read since her arrival. She has not yet avowed herself a convert from Romanism; but she eagerly listens to the scriptures, and to evangelical instruction. She also cordially coincides with her husband in his plans for gaining further information, and making himself useful to the mission.

During the winter months Benjamin was engaged in assisting Mr. Rand in the work of translation and revision. He, at the same time, pursued his studies in several English branches, such as reading, writing, arithmetic and Geography, and especially the Bible. He has also opportunities for reading the scriptures to the other Indians, and of conversing with them in their wigwams, and at his own house. For 2 months after that he was employed by a house-joiner, and was able to earn a dollar a day in carpenter work, besides his board.

About the middle of July Mr. Rand commenced a missionary tour through New Brunswick, and thought it advisable that Ben. should accompany him. To this the committee agreed. Mr. Rand found him a valuable assistant. The Indians would crowd around him, to hear him read the scriptures, and would listen to his addresses and remarks with great candour and interest. His open avowal of attachment to the primitive gospel, and his dependance upon Christ for salvation, and not upon the church, occasioned him some persecution and trouble from white Romanists. But by the Indians he was almost universally received with kindness. "Often," says Mr. Rand, "would they enquire, when will Pasumei visit us again. Ben. was well received also by the white people. He occasionally addressed public assemblies with much acceptance, in conjunction with Mr. Rand's lectures in behalf of the mission. He not only avows himself a convert from Popery but indulges the hope that he has been born again, not of corruptible seed, but of incorruptible, by the Word of God, which liveth and abideth forever. He has not united with any branch of the Christian church, and wishes to take no step rashly. He expresses too, an