

Many of them eventually swell the ranks of that degraded class from which they would now turn with loathing. My attention has of late been drawn to a pitiable case, that of the son of a well-known clergyman, whom I placed in a house in the neighbourhood where I reside. As this man caused me extreme annoyance, I could not help watching him with great care. This inebriate had sacrificed to his vice all that makes life most precious; he was cast off by his relatives, and literally regarded (and with perfect justice) with loathing by them all. His mother's sad death a few months ago made no impression on him or, at any rate, only for a few days; and he then went off drinking for three weeks. He looked healthy, strong, and well, and seemed not to have any appearance of the drunkard about him, though he had been intemperate fully a dozen years. As for self-control he appeared to me to have it unimpaired; but as far as I could judge he revelled in the horrible delight of drinking. He was a confirmed villain, without one redeeming trait. When he chose, he could do without drink for days, though he would deliberately begin to drink just when he chose to do so. Without any moral sense, or good feeling, or principle, he seemed much to resemble an animal. He used to boast that if he chose to drink he would, and he would defy anyone to control him. That was, unfortunately, only too true. On the other hand, he could abstain altogether, or leave off just when he liked, after one glass, or five or ten. What would Dr. Norman Kerr call such a case as this? Hardly disease, certainly not insanity; and yet even I, though I loathed the fellow, could not feel sure that he was thoroughly responsible at all times for his conduct. We doctors are never tired of talking of our own benevolence and self-sacrifice. Well, I do not call on the profession to sign the pledge, and betake itself to the temperance platform; but surely a larger proportion of us might show by our exhortations, and in our personal practice that we thoroughly understand what a disastrous thing intemperance is.—An "Old Oxonian," in the *Provincial Medical Journal*.

THE HEIGHTS OF WAVES.

All sorts of nonsense has been written about waves "mountains high." The truth is that when a ship is plunging down the back of one wave and is at the same time heeled over till her rail is close to the water, the next wave looks as if it would sweep completely over the vessel and therefore appears as big as a mountain. Lieutenant Qualtrough says: "We find reports of heights of 100 feet from hollow to crest, but no verified measurement exists of a height half as great as this. The highest reliable measurements are from forty-four to forty-eight feet—in itself a very remarkable height. Waves having a greater height than thirty feet are not often encountered." The height of wind waves is governed by what is called the "fetch." That means their distance from the place where their formation begins. Thomas Stevenson, author of "Lighthouse Illumination," and father of the well-known writer of our day, Robert Louis Stevenson, gives the following formula as applicable when the fetch is not less than six sea miles: "The height of the wave in feet is equal to 1.5 multiplied by the square root of the fetch in nautical miles." Let us suppose that in a gale of wind the waves began to form 400 miles from the ship you are on. The square root of 400 is twenty, which multiplied by 1.5 gives thirty feet as the height of the waves around the ship. Now, it is well known that in every storm there are occasionally groups of three or four waves considerably larger than the others. Captain Lecky is of the opinion that these are caused by the increased force of the wind in the squalls which are a feature of every big blow. Now, waves travel at a rate which is the result of their size. Waves 200 feet long from hollow to hollow travel about nineteen knots per hour; those of 400 feet in length make twenty-seven knots; and those of 600 feet rush forward irresistibly at thirty-two knots. Let us suppose, now, a wave 400 feet in length and thirty-eight or forty feet high rushing along at twenty-seven knots. It overtakes a slower wave making about twenty knots, with a height of twenty-five feet and a length of 200. The two seas become one, forming at the moment of their union an enormous wave. Just at that moment they meet one of those steamers called "ocean greyhounds," which, as every one knows, never slacken speed unless it is absolutely necessary for safety. She is butting into the storm at the rate of say eight knots an hour. She runs plump against a great wall of water which seems to rise suddenly out of the general tumult, rushing at her with a height of forty-five feet or more and a speed of over thirty miles per hour. There is a fearful crash forward, accompanied by a deluge, and as the tons of water roll off the fore-castle deck, it is found that damage has been done, and the officers on watch enter in the log the interesting fact that the steamer has been struck by a "tidal wave."—From "Great Ocean Waves," by W. J. Henderson, in *St. Nicholas* for September.

They understand but little who understand only what can be explained.—*Marie Ebner-Eschenbach*.

KENT BROTHERS, JEWELLERS.

This enterprising and well-known firm advertise in this issue of THE CANADA PRESBYTERIAN their fine stock of gold, silver and nickel watches. They carry probably the largest stock in Canada, and can therefore suit every one. They offer to send their illustrated catalogue free to those who apply. Their palatial store, at 163 Yonge Street, is well worth a visit.

THE MISSIONARY WORLD.

DEPUTIES TO MISSION FIELDS.

At the last meeting of the Presbytery of Toronto the importance of sending deputies to the mission fields within its bounds was brought up by Rev. A. Gilray; and it was resolved to send the following ministers and elders to visit said fields, viz.:—

1. Parkdale (Ruth Street Mission).—Revs. R. P. Mackay, D. J. Macdonnell and A. Gilray.
2. Mimico.—Revs. J. A. Grant, John Mutch and Mr. Norwich.
3. Malton.—Revs. W. Reid, A. Gandier and Mr. R. McClure.
4. Dixie.—Rev. J. A. Grant.
5. Port Credit. Rev. R. J. M. Glassford and Mr. Hugh McCaugherty.
6. Fisherville and Fairbank.—Revs. G. E. Freeman, W. A. J. Martin and Mr. J. R. Miller.
7. Stouffville.—Revs. J. Mackay, R. Thynne and Mr. John Milne.
8. Mount Albert and Ballantrae.—Revs. G. McKay and James Frazer.
9. Bonar Church.—Rev. John Neil and Mr. James Brown.
10. Dovercourt.—Rev. Walter Reid, Messrs. Joseph Gibson, A. Jeffrey and James McNab.

The object of the forementioned visitations is to further in every possible way the work of Christ. 1. By learning in each case from the missionary and the people the progress made during the previous months. 2. To enquire into the methods of managing the business in each congregation, and make such suggestions and changes as may be necessary to bring the management into harmony with the methods which obtain throughout the Church. 3. To learn what are the special requirements of these fields: view of future work.

Reports to be made by the deputies at next ordinary meeting of this Presbytery.

CONFERENCE AT SHANGHAI.

We learn from Dr. Happer that the conference has been a great success—430 members, of whom 204 are ladies. It has been arranged to prepare a Union Bible in three versions, all three agreeing in meaning—one in the high classical language, one in simple literary style, and one in Mandarin colloquial. This uniting on one Bible, after forty years of separation, is cause for devout thankfulness and rejoicing. When the report was brought in, the doxology, "Praise God from whom all blessings flow," was sung, and devout thanks given in public prayer.

Rev. Dr. Thwing gives this concise statement of the character and doings of the conference: 1. It was notable on account of its infrequency. Held but once in a dozen years or more, it had a special value. *Rarum charum est*. 2. Its numerical size. No such gathering of foreign missionaries on heathen soil has been before seen. At the first conference 129 were enrolled; 432 in this meeting. 3. Its geographic scope. Some were two, three or more weeks coming from distant parts of the empire by slow boats or slower mule-carts. India, Japan, Europe and America were also represented. 4. Its intellectual and moral power. It was a brainy conference. There were missionaries new and old, gray-haired sinologues, authors and Oriental scholars, physicians and surgeons, specialists in various branches of study and men eminent as educators or in the administrative departments of service. 5. The devotional and spiritual temper of the body kept pace with its intellectual. Occasional flies got into the ointment, but, for all that, the ointment was pungent and precious. 6. The wide horizon of thought opened by the fifty papers and the substantial unity of the conference in its central current of thought made it a stately and commanding power. Its well-prepared papers and debates, making a volume of 1,000 pages probably, will be a noble contribution to the already opulent literature of missions.

The following is a summary of the statistics presented to the conference, carefully compiled by the Rev. J. W. Davis, D.D., of Soochow: Foreign missionaries—Men, 589; wives, 390; single women, 316. Total, 1,295. Native helpers—Ordained ministers, 209; unordained, 1,260; female helpers, 180. Medical work—Hospitals, 61; dispensaries, 43; patients (during 1889), 348,439. Churches—Organized churches, 370; wholly self-supporting, 94; one-half self-supporting, 22; one-quarter self-supporting, 27. Bible distribution (1889)—Bibles, 1,454; New Testaments, 22,402; portions, 642,131. Total, 665,987. Communicants, 37,287. Pupils in schools, 16,816. Contributions by native Christians, \$36,884.54. The statistics of our own Church (the Presbyterian Church North) are included in the above summary. Dr. Happer also kindly gives them separately for the convenience of all interested. Men, 58; wives, 43; single women, 21; in all, 122. Native members of Presbyterian Church North, 4. Statistics of the eight Presbyterian bodies in China—men 124; wives, 93; single ladies, 46; in all, 263. Whole number of Presbyterian Church members, 12,347. Whole number of pupils, 3,794. Whole amount of contributions, \$13,007.

THE REV. KENNETH F. GRANT.

The Stewiacke correspondent of the *Halifax Presbyterian Witness* writes: The latest tidings which your readers have had of the movements of our returned missionary were from Cape Breton. His tour over the greater part of that island seems to have been alike refreshing to the missionary him-

self and to the congregations visited. Mr. Grant speaks in the highest terms of the cordial reception accorded to him. Since his return from Cape Breton Mr. Grant has not been idle. He has visited several congregations in the county of Pictou and more recently the Stewiacke Valley. On Friday evening of last week he addressed a large and appreciative audience in the Springside church. On Sabbath he spoke in the Upper Stewiacke village church in the morning, in the South Branch church in the afternoon, and in Middle Stewiacke church in the evening. All the services were largely attended. The congregations of Stewiacke are too deeply interested in foreign mission work to miss the opportunity of hearing a missionary so earnest and devoted and successful as Mr. Grant. We read of "born poets" and of "born musicians"; but certainly Mr. Grant may claim the enviable distinction of being a "born missionary." Foreign missions, he tells us, was the dream of his childhood. He is full of the missionary spirit, and "out of the abundance of his heart his mouth speaketh." A more devoted and successful advocate of missions it will be difficult to find. All his addresses have the same earnestness, freshness and power, and are calculated to produce most favourable and lasting impression. As we might naturally and reasonably have expected, the burden of his heart and the field upon which he delights to expatiate is the Trinidad mission, and I can assure your readers that this interesting and inviting mission field suffers nothing at his hand. I dare not attempt to furnish an outline of his several and varied addresses. Suffice it to say that for over an hour at each service he held his hearers in rapt attention, while he talked to them of the blessed and glorious work in which the missionaries are engaged in Trinidad. In speaking of the Trinidad mission he referred briefly to the situation and natural resources of the island to the inception of our mission to the Asiatics twenty-three years ago, to the growth and progress of the mission to the difficulties which the missionary has to encounter, and to the many tokens of encouragement which he receives in the prosecution of his work. He relates several striking incidents in connection with his own field which illustrated the wonderful triumph of the Gospel over the hearts of the heathen. In referring to the wants of the mission field in Trinidad he emphasized strongly the need of a school or college for the training of a native ministry. The mission council of the island has long felt the necessity for such an agency, and the Foreign Mission Board (Eastern Division) has sanctioned the establishment of such a college as soon as funds for that purpose can be procured. The sum of \$4,000 will be sufficient to purchase a property and to erect suitable buildings. He had already received \$2,800, and he would be thankful to get the remaining \$1,200 before he returns to Trinidad in October. Each of the pastors commended the proposed college to the favourable consideration of their people, and the modest sum of \$25 asked from each congregation visited will certainly be realized. At Middle Stewiacke, after the missionary and the pastor had presented the claims of the proposed training school, and before the collection plate was passed round, a large-hearted member of the congregation rose and stated that he had not brought money enough with him and that he would forward \$5 more, and he expressed the hope that the collection would be such as to give proof of their interest in this very important work.

EROMANGA AND NGUNA.

The Rev. Peter Milne, trained by the Free Church of Scotland, and missionary of the Otago Church in the New Hebrides, thus describes the progress during the fifty years since John Williams was killed on Eromanga: The chief who killed Mr. Williams had died a heathen, but his two sons were now church members, and one of them had laid the foundation-stone of a church lately. The next missionaries were the Gordons, three in number, all of whom were subsequently killed by the ignorant natives. Following them came Mr. Robertson, of Nova Scotia, who was now carrying on the work. At present there were thirty-three schools at Eromanga, and the large majority of the people of that island were now professedly Christian, and were supporting their teachers either in whole or in part. At Tanna three languages were spoken, although it was small, and as a consequence the Gospel had not been spread to any extent on it. At Nguni, his principal station, there was a population of about 800 persons, and there were ten schools, with an attendance of 400. Last year he baptized 576 persons, of whom 433 were adults. Seven years ago there were only forty church members in his district, and now there were over 300. At that time there were only three schools; now there were twenty-six, with an aggregate attendance of 1,500. Of the six islands in his district four were wholly Christian, and they were now beginning to turn out teachers of their own kind.

LAST year being considered the jubilee year of the New Hebrides Mission, these statistics were carefully collected from each missionary. There were fourteen missionaries, and four on furlough last year, for an estimated population of 61,199: Number of communicants, 1,529; number admitted during the year, eighty-nine; persons baptized, 272; attendance at regular Sabbath service, 7,997; attendance at candidates' class, 105; teachers located under missionary charge, 169; schools under missionary charge, 162; number attending these schools, 5,917; estimated or known population of field of labour, 61,199; marriages celebrated during year, fifty-seven; Scripture translations in circulation, twenty-four; other books in circulation, thirty-seven.