

PROFESSOR TYNDALL AT
NIAGARA.

On the first evening of my visit, I met, at the head of Biddle's Stair, the guide to the Cave of the Winds. He was in the prime of manhood—large, well-built, firm and pleasant in mouth and eye. My interest in the scene stirred up his, and made him communicative. Turning to a photograph, he described, by reference to it, a feat which he had accomplished some time previously, and which had brought him almost under the green water of the Horseshoe Fall. "Can you lead me there to-morrow?" I asked. He eyed me inquiringly, weighing, perhaps the chances of a man of light build and with gray in his whiskers in such an undertaking. "I wish," I added, "to see as much of the Fall as can be seen, and where you lead I will endeavor to follow." His scrutiny relaxed into a smile, and he said, "Very well; I shall be ready for you to-morrow."

On the morrow, accordingly, I came. In the hut at the head of Biddle's Stair I stripped wholly, and redressed according to instructions—drawing on two pairs of woolen pantaloons, three woolen jackets two pair of socks, and a pair of felt shoes. Even if wet, my guide urged that the clothes would keep me from being chilled, and he was right. A suit and hood of yellow oil-cloth covered all. Most laudable precautions were taken by the young assistant of the guide to keep the water out, but his devices broke down immediately when severely tested.

We descended the stair; the handle of a pitchfork doing in my case the duty of an alpenstock. At the bottom, my guide inquired whether we should go first to the Cave of the Winds, or to the Horseshoe, remarking that the latter would try us most. I decided to get the roughest done first, and turned to the left over the stones. They were sharp and trying. The base of the first portion of the cataract is covered with high boulders, obviously the ruins of the limestone ledge above. The water does not distribute itself uniformly among these, but seeks for itself channels through which it pours torrentially. We passed some of these with wetted feet, but without difficulty. At length we came to the side of a more formidable current. My guide walked along its edge until he reached its least turbulent portion. Halting he said, "This is our greatest difficulty; if we can cross here, we shall get far toward the Horseshoe."

He waded in. It evidently required all his strength to steady him. The water rose above his loins, and it foamed still higher. He had to search footing amid unseen boulders, against which the torrent rose violently. He struggled and swayed, but he struggled successfully, and finally reached the shallower water at the other side. Stretching out his arm, he said to me, "Now come on." I looked down the torrent as it rushed to the river below, which was seething with the tumult of the cataract. Dr. Saussure recommended the inspection of Alpine dangers with the view of making them familiar to the eye before they are encountered; and it is a wholesome custom, in places of difficulty, to put the possibility of an accident clearly before the mind, and to decide beforehand what ought to be done should the accident occur. Thus wound up in the present instance, I entered the water. Even where it was not more than knee-deep its power was manifest. As it rose around me, I sought to split the torrent by presenting a side to it; but the insecurity of the footing enabled it to grasp the loins, twist me fairly around, and bring its impetus to bear upon my back. Farther struggle was impossible; and, feeling my balance hopelessly gone, I turned, flung myself toward the bank I had just quitted, and was instantly swept into shallower water.

The oil cloth covering was a great inconvenience; it had been made for a much stouter man, and, standing upright after my submersion, my legs occupied the centers of two bags of water. My guide exhorted me to try again. Prudence was at my elbow, whispering dissuasion; but, taking everything into account, it appeared more immoral to retreat than to proceed. Instructed by the first misadventure, I once more entered the stream. Had the alpenstock been of iron it might have helped me; but, as it was, the tendency of the water to sweep it out of my hands rendered it worse than useless. I, however, clung to it by habit. Again the torrent rose, and again I wavered; but by keeping the left hip well against it, I remained upright, and at length grasped the hand of my leader at the other side. He laughed pleasant-

ly. The first victory was gained, and he enjoyed it. "No traveller," he said "was ever here before." Soon afterward, by trusting to a piece of drift wood which seemed firm, I was again taken off my feet, but was immediately caught by a protruding rock.

We clambered over the boulders toward the thickest spray, which soon became so weighty as to cause us to stagger under its shock. For the most part nothing could be seen; we were in the midst of bewildering tumult, lashed by the water, which sounded at times like the cracking of innumerable whips. Underneath this was the deep, resonant roar of the cataract. I tried to shield my eyes with my hands, and look upward; but the defense was useless. My guide continued to move on, but at a certain place he halted, and desired me to take shelter in his lee and observe the cataract. The spray did not come so much from the upper ledge as from the rebound of the shattered water when it struck the bottom. Hence the eyes could be protected from the blinding shock of the spray, while the line of vision to the upper ledges remained to some extent clear. On looking up over the guide's shoulder I could see the water bending over the ledge, while the Terrapin Tower loomed fitfully through the intermittent spray-gusts. We were right under the tower. A little farther on the extract, after its first plunge, hit a protuberance some way down, and flew from it in a prodigious burst of spray; through this we staggered. We rounded the promontory on which the Terrapin Tower stands, and pushed, amid the wildest commotion, along the arm of the Horseshoe, until the boulders failed us, and the cataract fell into the profound gorge of the Niagara River.

Here my guide sheltered me again, and desired me to look up; I did so, and could see, as before, the green gleam of the mighty curve sweeping over the upper ledge, and the fitful plunge of the water as the spray between us and it alternately gathered and disappeared. An eminent friend of mine often speaks to me of the mistake of those physicians who regard man's ailments as purely chemical, to be met by chemical remedies only. He contends for the psychological element of cure. By agreeable emotions, he says, nervous currents are liberated which stimulate the blood, brain, and viscera. The influence rained from ladies' eyes enables my friend to thrive on dishes which would kill him if eaten alone. A sanative effect of the same order I experienced amid the spray and thunder of Niagara. Quickened by the emotions there aroused, the blood sped exultingly through the arteries, abolishing introspection, clearing the heart of all bitterness, and enabling one to think with tolerance, if not with tenderness, on the most relentless and unreasonable foe. Apart from its scientific value and purely as a moral agent, the play, I submit, is worth the candle. My companion knew a more of me than that I enjoyed the wilderness; as I bent in the shelter of his large frame, he said: "I should like to see you attempting to describe all this." He rightly thought it indescribable. The name of this gallant fellow was Thomas Conroy.

We returned, clambering at intervals up and down so as to catch glimpses of the most impressive portions of the cataract. We passed under ledges formed by tabular masses of limestone, and throughout some curious openings formed by the falling together of the summits of the rocks. At length we found ourselves beside our enemy of the morning. My guide halted for a minute or two, scanning the torrent thoughtfully. I said that, as a guide, he ought to have a rope in such a place; but he retorted that, as no traveler had ever thought of coming there, he did not see the necessity of keeping a rope. He waded in. The struggle to keep himself erect was evident enough; he swayed, but recovered himself again and again. At length he slipped, gave way, did as I had done, threw himself flat in the water toward the bank, and was swept into the shallows. Standing in the stream near its edge, he stretched his arm toward me. I retained the pitchfork handle, for it had been useful among the boulders. By wading some way in, the staff could be made to reach him, and I proposed his seizing it. "If you are sure," he replied, "that in case of giving way you can maintain your grasp, then I will certainly hold you." I waded in, and stretched the staff to my companion. It was firmly grasped by both of us. Thus helped, though its onset was strong, I moved safely across the torrent. All danger ended here.

We afterward roamed sociably among the torrents and boulders below the Cave of the Winds. The rocks were covered with organic slime, which could not have been walked over with bare feet, but the felt shoes effectually prevented slipping. We reached the cave and entered it, first by a wooden way carried over the boulders and then along a narrow ledge to the point eaten deepest into the shale. When the wind is from the south, the falling water, I am told, can be seen tranquilly from this spot; but, when we were there, a blinding hurricane of spray was whirled against us. On the evening of the same day, I went behind the water on the Canada side, which I confess, struck me, after the experience of the morning, as an imposture.—*Popular Science Monthly.*

HOW I GOT OUT OF SPAIN.

In the present disturbed state of Spain, it is not easy for travellers to pass from one part to another without encountering bands of Carlists. The following letter from the London Freeman graphically shews some of the difficulties:—

On the evening of the 20th of April the snowy range of the Guardarramas, visible from the station at Madrid, promised a contrast to the sunny plains of Andalusia which I had quitted yesterday. At the booking office tickets were issued to Vittoria only; armed with one of these, and provided with the ample space which the carriages of the "North of Spain" and a paucity of travellers permitted, the night passed away, and the morning broke clear and cold as Burgos was reached. At Miranda, between which and Vittoria the troubles of the railway begin, we took in a guard of soldiers, and a cremated engine, and felt our way by waiting at stations for information from scouts. Passed the bridge which formed the obstruction on the outward journey, and sped on to Vittoria. Here all progress ended. Found that there were passengers for France sufficient to fill a diligence, about 12. Agreed with proprietor, and whilst preparations being made, all went to the hotel, and ladies first and gentlemen afterwards made the most of one basin and an ample supply of water and towels, and enjoyed a capital breakfast. A portrait of Santa Cruz was handed round, and the conversation, which was full of fun, ran chiefly on the deeds of this redoubtable scoundrel, and the high probability of our encountering him before the day was over. We inquired into the political opinions of our *mayoral* (conductor) and found that we were to have at least one *Carlista* with us. Thus provided I took a seat beside the driver and we jingled along the poplar-lined road across the plain to Alava, its rim of mountains gradually contracting, and soon were amidst the beautiful hills. The barley was waving in ear, the flax in flower, cowslips, lupins, larkspurs, and a profusion of flowers greeted us at every turn. We got into the region of picturesque villages with semi-ruined public buildings, so characteristic of the Pyrenees, among the grave people busy in hand-cultivation, rows of men and women using the peculiar digger which here takes the place of the plough—reached the Carlist district, looked out for armed men, and as we entered a long straight valley after passing Ullibaldi, our suspense was put an end to. Five men appeared ahead, acting in concert, took up a position, one on one side of the road and the rest on the other, all holding guns as if they were just about to fire on sparrows. They appeared to obey the orders of an ill-looking youth, having a long silver tassel depending from the centre of the red cap, which he wore in common with the others, and which was almost the only fragment of uniform. The man on our right carried a big blunderbuss. They ordered us to stop and the *mayoral* and driver to dismount, and required the Mail to be given up. The *mayoral* assured them that he had no letters at all except the way-bill, which he produced, told him that the Mail had been sent over the mountains by another route. One of the men then went to the inside passengers and asked for arms. On being assured that we carried none, and that we were *hond fide* passengers, and after scanning us individually, and considerable talk with the *mayoral*, the chief ordered us to proceed. One of the band was posted to watch the road whilst all this was going on. The journey was resumed, and so was the scarcely interrupted mirth of our party. We soon reached scenery of exquisite interest, but were again, after an hour's progress, interrupted by three armed *Carlistas*, who repeated with threatening aspect the inquiry for mails and arms, and were satisfied with

similar assurances. We passed on without further molestation through several curious little towns, the houses having huge balconies, and massive architecture, decorated occasionally with mural paintings—by the sulphur baths of Escoraza; met a carriage coming the opposite way with passengers and some letter-bags. The two *mayorals* held a consultation, and it was decided to leave the letter-bags in the custody of the regular soldiers now reappearing on the scene. The latter had intrenched themselves in the public buildings, and had constructed gateways and loop-holed defences in each town. One of those ubiquitous irrepressible cosmopolitans, the "correspondent of a London morning paper" hastily booked our information, and intrusted a "special" to our *mayoral*. We jogged on amidst increasing industry and exquisite verdure, until the higher range of the Pyrenees came in sight. For an hour one of the principal peaks, about ten thousand feet high, dominates the valleys just like the Matterhorn does Val Tournanche. The resemblance is striking. We got through Vegara, and soon again reached the deserted line at Zumarraga, where there was a reunion of carriages, local passengers, carriers and soldiers, all anxious for our news. We dined and resumed our way, adding at one point four bullocks to the motive power, and amidst beautiful scenes got on in due time to Tolosa, and after dark on to San Sebastian. A night's rest and a drive in the morning took us to forlorn Irun; a short walk down the deserted line led to the Bidasoa; crossing it we were again in sight of straight telegraph wires, steam, smart uniforms, and progressive life. Carlism is a transient disorder; the state physicians are afraid to bring against it the force of the nation in the army, fearing the latter far more than they do the *Carlists*. They prefer that this crazy phase of monarchism should die out; and this would have been the case long ago but for mischievous external aid. My own observation leads me to conclude that owing partly to well-founded dread of betrayal either by king or president, and partly to diversities of race and condition, so slightly affected by intercommunication, the people of Spain desire a federal republic, and sooner or later will have it. If the able and honest men now ruling can accomplish their mission by the arts of peace; if Figueras can obtain obedience to a constitution; if Salmeron can effect his fond boast of rendering a minister of grace (*i.e.* religion) unnecessary by obtaining its complete divorce from the state, and rendering also his second office, minister of justice, needless, by the establishment of a pure judicature; and if the eloquent anticipations of Castelar can soothe the nation, all will yet be well. If these men should, in despair, throw up the reins, or some military chief should found a dictatorship after the old Roman fashion, the regeneration of Spain will still be indefinitely prolonged. The nation is determined, whatever else it may have to submit to, not to re-instate the priests in the place of power and wealth, and it is against this resolute and unanimous determination of all the towns, all the east, all the south, and all the trading interest of Spain, that the Pope is making his last agonising struggle by means of such lieutenants as Santa Cruz, and of the ignorant superstition of the poor sincere benighted Basques.

S. R. PATTERSON.

Bordeaux, April 22nd.

Correspondence.

For the Christian Messenger.

OUR HOME MISSIONS.

We have been asked to produce reasons for preferring one Home Missionary Society to several organizations that aim at doing nearly the same work. In the *Messenger* of April 2, we assigned the following reasons for our preference:—1. There is a general desire for Union in Home Mission work. 2. This Union would bring the denomination more closely together. 3. It would be the means of collecting more money. 4. It would do more work. 5. It would do the work more intelligently. We have considered the first four points at some length. It remains for us now to discuss the last.

That our Home Mission work has not been done very intelligently, will, we presume, be generally admitted. As this statement will not likely be called in question, we shall withhold several illustrations that would remove all doubt on the subject. When we write thus, we do not cherish any fault-finding spirit. And we think the members of the different Boards

will not charge us with being severe or unkind. Prominent members of the Western Board have admitted that appointments had been made of men whose qualifications were not of a satisfactory character, and to fields of which the Board were almost entirely ignorant. An influential member of the Board of the Home Missionary Society, stated last year at the Western Association, that in the matter of Home Missions he had been "working in the dark." It could scarcely be otherwise with the slender means the Board had for gaining information. We would not presume to say that the members of these Boards did not act intelligently so far as they could under the circumstances. But we think they did not arrange forces and direct agencies in such a way as to give them sufficient knowledge of the missionaries they employed and the fields they intended to cultivate. Hence, under those circumstances, the work could not be intelligently done.

Now let us examine the plan of the Union Board as published in their programme. (See *Messenger*, March 19.) The plan was to send out a General Agent, and two or more Colporteurs. In addition to the intelligence they would communicate to the Board, the Corresponding Secretary would seek to gain information about men and places from the Secretaries of County Ministerial Conferences, and from prominent men in destitute sections. With such facilities for acquiring information, could not the Union perform Home Mission work more intelligently than the Societies that have no General Agent and no Colporteurs? We think the question must be answered in the affirmative. No further argumentation is needed, therefore, to shew the superiority of the Union to the other Societies in the manner of doing Home Mission work.

MISCELLANEOUS REMARKS.

The Constitution of the Home Missionary Union has been criticized at different times. The Constitution and purpose of the Union, however, bear a striking resemblance to those of the American Baptist Missionary Society. The Secretary of Home that Society wrote last year as follows:—

1. "The grand purpose of the organization was the preaching of the Gospel to every creature in our country." This is the purpose of our Union—to preach the Gospel to the French and Gaelic population as well as to the English.

2. "To obtain and disseminate information respecting the condition of the country, and especially of the Baptists."

It is one purpose of our Union to disseminate Baptist literature. Although some seem to ridicule this purpose, we have great faith in the plan. When we came to Yarmouth, there was not a copy of the *Macedonian and Record* taken here, so far as we knew. We soon succeeded, however, in putting that little sheet into 136 families. That paper did an untold amount of good in our church, and we wish it were read in every Baptist family in Nova Scotia. We also introduced 300 or 400 copies of Selden's *Scripture Catechism* into our Sabbath Schools. We should be glad if every Pastor in the province could do likewise. We use the *Catechism* in our own family, and we most cordially recommend it to all the families in the land. Numbers of Dr. Cramp's *Catechism of Baptism* have been circulated here, and more than 200 copies of his "Baptist History," and 600 of his "Case of the Baptists." For our own part, we are not ashamed nor afraid to circulate such Baptist literature. And we think the plan of the Union Board to send out Colporteurs with Baptist and non-sectarian books, and to circulate a little paper devoted to Education and Home Missions, commends itself to the intelligence of our churches.

3. "To arouse the Baptist community throughout the United States to systematic, liberal and vigorous efforts in the cause of Home Missions." This is just what we propose to do. The General Agent and Missionaries would be furnished with a plan for systematic benevolence, which they would be instructed to try to introduce into every church.

4. "To combine in one sacred brotherhood all the friends of Domestic Missions in our denomination throughout the United States." This is what we wish to do for Nova Scotia.

The American Society in 40 years has given support to more than 600 laborers, who have preached more than half a million sermons, baptized 61,500 believers, organized 2000 churches, and more than 2000 Sunday Schools, and resisted in bringing into the ministry 1000 brethren. Its Missionaries now preach in a dozen differ-