

Abroad.

BY P. W. GEER.

My grandfather carried patriotism to extremes. It may have been a good thing for him, for it made him quite satisfied with home. To him there could be no heaven as pleasant as this world; his country was the finest in the world; Oregon was the finest state in the Union, and the Waldo Hills were far ahead of any other locality in the production of grains, fruits, and vegetables. In all this I am inclined to think that he was not very far from right; but when he compared Silver Creek Falls with Niagara, I think he was slightly prejudiced, or else he did not take a trip on the Maid of the Mist when he visited the great cataract.

When I was a little boy I often heard my grandfather tell of his trip to Niagara Falls with a feeling of disgust, and at the same time a great deal of pride, saying that Niagara Falls are very tame by the side of our own Silver Creek Falls. Well, of course, the last named falls are grand indeed. A fair-sized stream of water jumps 200 feet at a single leap into a pool below, and one can go under the falls and back of the water 100 feet or so. The great caves and canyons, the huge trees and high mountains all combine to make the scenery second to none of its kind in the world. Niagara Falls are entirely different, in fact there is as much difference between Niagara and Silver Creek as there is between a great plain and an ocean. One should see both and both will be appreciated. Niagara is surrounded by no high mountains, but, instead, is on rather a level plain. The Niagara River flows from Lake Erie toward the north, and when less than half way to Lake Ontario, it makes a plunge of 160 feet into the gorge below. It is estimated that 100,000,000 tons of water passes over the Falls every hour.

I arrived at the little city of Niagara on an electric car from Buffalo, after a delightful ride of an hour and a half. When I alighted from the car at Prospect Park, there were a dozen hackmen to every passenger, and some of them were generous enough to offer to take me all around and show me the sights for four dollars! Dr. Wetmore had told me better than to accept such generous offers, and had given me a letter of introduction to Mr. John C. Level, manager of the Niagara Reservation Carriages, which take you around and show you all the sights for the small sum of fifteen cents.

I was anxious to get a view of the Falls, so went at once to the nearest point of view, the brink at Prospect Park on the American side. Can you imagine a mile of water plunging 160 feet? That is what first

met my gaze. Right at my feet was the American Fall, extending 1,060 feet; then Goat Island, separating the two falls, extending 1,300 feet more; then comes the great Horseshoe, with a curve of 3,010 feet. What a tumbling mass of water! One almost feels an impulse to follow the great rush of waters over the brink.

Satisfying myself that the Falls were worth looking at, I made inquiry for Mr. Level, whom I soon found at the stables. Mr. Level, as well as being manager of the Reservation Carriages, is a great philosopher. He doesn't care a rap for old ideas, unless they will stand investigation and the light of reason. He expressed a wish that geology and physics be taught on a common sense basis in the Liberal University, and then told me of his idea of Niagara Falls. There is a theory, with which most of us are acquainted, that great gorges and chasms are worn in solid rock by the friction of the water. Mr. Level disputes this theory. He showed me that right at the brink of the American-Fall moss is growing on the rocks where the friction should be the greatest. "If those rocks are being worn away by friction," said the level-headed Mr. Level, "how can the moss grow on them?" Mr. Level says that instead of being worn away by the action of the water, the rock is blown away by the action of air compressed by the water. He took me in his buggy, and we drove out on to Goat Island in view of the Horseshoe Fall. He showed me that in the center of the great Horseshoe, where the chasm is narrow and the power of the water is tremendous, there is an explosion regularly every fifteen seconds. This explosion sends a shower of white spray 200 feet into the air, which is beautiful in contrast to the deep green hue of the water as it tumbles over the precipice.

Mr. Level claims that this explosion is caused by the air being compressed by the action of the water, and when it reaches a certain pressure it explodes with a terrific force regularly four times a minute. This, according to Mr. Level's idea, is what wears away the rock, and I most believe he's right. The Horseshoe Fall, where the explosion is the greatest, has worn away many feet in a few years, while the American Fall, where there is but little explosion, scarcely wears away at all. If it is the friction of the water which wears away the solid rock, why should it wear out a chasm over 300 feet deep from the Falls to Lake Ontario, and only a few feet deep from Lake Erie to the Fall? The rock is all the same formation. This is worth thinking about.

Mr. Level took me next to Prospect Park, where we left the horse and buggy and went down the Incline Railway to the bank of the

river just below the Falls. Here, my friend introduced me to Mr. Frank Le Blond, manager of the Maid of the Mist, which makes hourly trips up the river right to the very base of the Falls. Mr. Level left me in the company of my new friend and returned to the park above. The last I saw of him he was sliding up through a hole in the ground at a rapid rate.

Mr. Le Blond has about the best show to be seen at Niagara Falls, and no one has a right to say that he has seen the Falls if he has not taken a trip on the Maid of the Mist. From the deck of this little boat you get by far the best view of the great cataract. For fifty cents you are permitted to take the most novel and charming boat ride you ever took in your life. Leaving the Canadian shore, the little boat steams across the river, which at this point is calm, and the waters are placid. The boat ties up at the American side near the Incline Railway station, and you run down the plank walk to the landing. The cataract is roaring above you, and perhaps the wind is blowing the spray over you, but you go on board the boat and enter the saloon, where you dress in a rubber suit, and then go up on deck and defy the spray to soil your clothes. Peeking out of their caps, the passengers all look alike, dressed in black from head to foot. The boat gives a shrill whistle, and away you go, right through the spray toward the thundering waters.

Presently you pass out of the spray, and there is the American Fall in front and to the left of you. Luna Island to the right divides the American Fall, and if you look at the base, you will see the stairway leading between the two divisions of the Fall to the Cave of the Winds. Perhaps you will see some yellow-looking objects climbing the stairs, and going directly into the face of the tumbling waters and spray. These are men and women, dressed in oil suits, going under the Central or Luna Fall to the cave.

Next you pass Goat Island, which extends for 1,300 feet, and divides the waters of the American from the Horseshoe Falls. You will see hundreds of people on the island watching the little boat on its wild trip. In a moment more you are right in the circle of the Horseshoe Fall, and all you can see or hear is the roaring cataract, which appears to be on all sides of you. The powerful engines drive the little boat closer and closer, until you toss apparently helpless on the surging waters, which are churned incessantly by the water which at this moment appears to be tumbling right out of the sky. In the narrowest place of the Horseshoe bend you can see the terrific explosions mentioned before, and the spray dashing high in the air, sometimes

almost twice as high as the Falls themselves.

For a moment the engine stops, and the boat drifts helplessly, when you 'bout face and steam off like a vanquished foe into the more peaceable view below; and returning near the Canadian shore, you have a splendid view of the entire mile of water tumbling from the sky. The boat halts at the Canadian shore to exchange passengers, and, if you like, you can go ashore to Her Majesty's dominion before crossing to the American side.

I bade goodbye to Mr. Le Blond, who had shown me many courtesies, and ascended the Incline Railway to the park, where I climbed into one of the Reservation carriages to take a trip over Goat Island again. For fifteen cents you get a ticket, which entitles you to stop over at as many places and as long as you choose. Crossing the American fork of the river, you are on Goat Island, and after winding among the trees the road brings you to Luna Island, which divides the waters and forms the cave below. After viewing the Falls from this point of view, you can enter any of the Reservation carriages and ride to the Biddle Stairs, which take you down to the base of the Falls. If you wish to visit the Cave of the Winds, you stop at the house at the top of the stairway, and exchange a dollar for one of those yellow oil suits and a guide.

In going down the spiral stairs you can easily imagine that you are a yellow bug climbing down a corkscrew. The stair is encased in an octagonal box, and when you reach the bottom you are out of breath and can't tell which way is from you. The Central or Luna Fall pours down right near you to the right, as you face the river at your feet. You follow along a narrow shelf until you are right at the water's edge, with the spray blowing over you, but you don't care for you have left every stitch of your clothing in the room above and are now dressed in a water-proof oil suit. At the base of the Falls are immense boulders, which are pounded incessantly by the waters tumbling from above. Following a narrow stairway you go out on to these boulders, while the water dashing by you and the mist blowing over, almost takes your breath away. Turning to the right you pass right between the two Falls, which are so close to each other that their waters are somewhat mixed. Clinging to the banisters of the stairway, you advance step by step, now ascending then descending over the huge boulders, with blinding spray and deafening roar all about you. Finally you pass from view of the outside world, and are right behind the column of water as it rushes over you. You descend a flight of stairs, and stand on a natural rock floor in the Cave