

Pan-American Notes.

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NO. I.

The crowded train speeds on. What power in that iron horse! We cross the Upper Niagara Rapids, and into Buffalo we come. Soon it unloads its great freight of humanity, and suddenly the rainbow city bursts on our wondering eyes. The roar of the inside crowds reaches our ears, ere we pass through the turnstile that registers with unerring accuracy the days' attendance. Now we pass into the heart of a new world, and as we gaze around, above, and beyond, the one word colossal involuntarily rises to the lips, and we are thrilled with a strange joyousness as we behold the victorious achievements of man.

The great buildings are arranged according to the letter T, all the buildings being of such proportions and architecture as to present a harmonious and pleasing picture, the focal point of which is the splendid court of fountains. Motor, motion, action, roar and pour, all contribute to fasten on the visitor one feature that distinguishes this exhibition from all others, namely the abundance of power. The climax of power is seen in the unprecedented, unique and incomparable illuminations that turn night into day. For the secret source of all this power we turn our eyes to the ingenious device that has

HARNESSED NIAGARA FALLS.

The Company that operates the almost unlimited power of the water-fall, owns two miles of water frontage above the Falls. Through a vast tunnel the water flows to a wheel-pit where there are ten inverted twin turbines, each of five thousand horse power. Here governors automatically control the flow of water at turbine wheels, preserving a constant speed, not affected by changes in the weight or rush of the waters varied according to rains on the upper rapids.

Ten dynamos of five thousand horse power each connected to turbine by vertical shaft, are erected in power house number one. The power generated is alternating current, two phases, two thousand two hundred volts, twenty-five cycles per second. The dynamos make two hundred and fifty revolutions per minute, a peripheral speed of one thousand seven hundred and twenty-seven miles per minute.

A second wheel-pit and power house similar to the above are being built, on the completion of which the Niagara Falls Power Company expects to develop a total of one hundred thousand electrical horse power.

The most distant point to which the power is sent along the wires is a sub-station in Buffalo, 31.4 miles. At first it was doubted if it could be sent so far as the exhibition grounds without a loss that would not be balanced by what was secured. But science triumphed. Now the power company generates about twenty-two thousand volts at the Falls Power House, which are reduced to eleven thousand volts at the city line. Many thousand volts are sent to exhibition grounds. I saw the great transformer that transforms these to eighteen hundred volts. By this quantity of power are driven vast machines, great fountains forced into the air, and at night two hundred thousand lamps illuminate inside and outside of buildings.

It is reported that Czolgosz was electrocuted by receiving eighteen hundred volts for forty-five seconds. I asked an electrician why it required as much power to kill him as it required to run all the vast machinery and all the illuminations for forty-five seconds, and he replied, that the human body had a greater power of resistance than any other substance, and that if Czolgosz's body had been solid copper, the eighteen hundred volts would have melted him to molten liquid in forty-five seconds.

Talking of electricity, I was greatly interested and delighted by the varied exhibits in the "electricity" building. I saw the largest storage battery in the world. Weight eight thousand seven hundred and fifty pounds, two thousand amperes for eight hours. And I saw a very small storage battery of fifteen amperes for four hours. An ordinary sixteen-candle incandescent lamp has a current passing through it of about one and a half amperes. The storage battery, we hope will bring to us great and many-sided comforts, that will reduce labor, increase efficiency, and conduce to sanitation.

Imposing and wonderful as were many buildings and exhibits at the Pan-American, the exhibition as a whole cannot be said to excel the "White City" at Chicago or the Paris Exposition. But there was one feature of Buffalo a "Rainbow City," that its founders may with justice be proud of, and which surpassed anything that ever preceded it by way of an exhibition. That was the extraordinary display of electric lights, by which all the buildings were illuminated outside from base to summit in outline. Indeed so vast and extensive that night was turned to day. Of all the illuminated buildings the "Electric Tower" was the most striking. Standing in the centre of the pavement facing the "Electrical Tower" the scene that met your eyes has never been surpassed for beauty of design and marvel of execution. This tower rises to a height of 391 feet and is of graceful

proportions, being 80 feet square, perfectly square, its great height is eased to the eye by two colonades at its base. These are 75 feet high and curving to the Southward form a semi-circle of majestic effect. Within this court of columns a scene of surpassing loveliness was beheld. Almost level with the ground was a lake from which played many fountains. Just beneath the water were electric lights ingeniously arranged so as to shine up on the falling spray. But of all artificial water falls, that from the heart of the great Tower was unique in the history of architecture. In a vast niche about 70 feet from the base of the tower, a great volume of water fell over ledges of opal-colored plate-glass. Inside these great glass ledges were strong, brilliant electric lights, and as the water dashed over them the effect would have satisfied even the Babylonian King who built the hanging to please his Queen. To add to this and enhance the fairy-land effect of this fall, concealed lights shone a softened radiance over the dashing water that was hurrying to the court of fountains. About two-thirds distance up the squareness of the great tower was changed into forms of columnar beauty; the highest point being a golden dome on which was poised a figure, in the attitude of running. She was the goddess of Light, and possibly the conception of the architect was, that this exhibition was a messenger of light and liberty to all the Americas. From base to summit incandescent lamps were arranged in forms of exquisite design, whose radiance lent a glory that rightly made the tower the focal point of the attractions of eventide. She may, but it is doubtful if St. Louis can duplicate such fascinating combinations of radiant effects, there being only one Niagara to furnish such an inexhaustible supply of cheap power.

Professor George Adam Smith, D.D., LL.D.

AN APPRECIATION—BY W. ROBERTSON NICOLL, M. A., LL.D.

There is no more interesting personality in the ranks of the church to-day than George Adam Smith, none who belongs in a more real sense to the church universal—none who promises to do greater things in the future. He has already accomplished much, and even very much; but he is one of those men who may break out in new directions and do work which no one could have calculated on. So long as there is this element of possibility in a man, he is interesting, and the more that element exists the more interesting he is. He has found himself so far, but he has not found anything like the whole of himself.

George Adam Smith was born at Calcutta on October 10, 1856. His father, Dr. George Smith, was editor of a newspaper, once of great influence, entitled *The Friend*, of India. He was associated in this venture with Meredith Townsend, who came to England and bought *The Spectator* about 1860, when the circulation was hardly 600 copies, and raised it to more than twenty times that number before he left it. Dr. George Adam Smith's mother was Janet Colquhoun, daughter of Robert Adam. She died some years ago, leaving a deep impression of the sanctity, elevation, and charm of her character on all who knew her.

Dr. Smith had thus a happy start in life. He was from the first something of a cosmopolitan. He was taught from the beginning to appreciate excellence of every kind. He learned to combine an enthusiasm for literature and learning with a deep evangelical fervor. We believe he himself ascribes the most definite of his early religious experiences to meetings held during the Moody revival. For Mr. Moody he has always cherished a warm admiration and reverence, and higher critic though he is, he was able to work with Moody on his last visit to America, and wrote a heartfelt tribute to his memory as a preface to Professor Drummond's essay. The little book was widely circulated in the United States, but has not been published here. Dr. Smith took his early training at the high school and University of Edinburgh. It was when he went to the New College, however, that his bent developed. He was strongly influenced by Professor A. B. Davidson, a man of whom it has been truly said that in his quiet way he has done more to influence theological thinking in Scotland during the last thirty years than any other. Smith took to Hebrew and the study of the Old Testament. Even then it was characteristic of him that he cared very much for humanity. He was deeply interested in the sunken masses. His father's minister was then Dr. R. G. Balfour, of the New College Church, and young Smith served under him as a missionary, and became acquainted at first-hand with the problems that faced the social reformer and the Christian. Thus he has never been a mere scholar or theorist. He has always been in all his writings endeavoring to face the real, appealing, needy, claiming world. After finishing his course at Edinburgh, he studied at Tubingen and Leipzig, and travelled in Egypt and Syria, so that when he came to enter professional life he had a very unusual equipment of experience as well as of learning.

He leaped into fame as the author of his great com-

mentary on the book of Isaiah. The editor of *The Expositor's Bible* had great searchings of heart as to the proper expositor of Isaiah, who would combine first-rate Hebrew scholarship and imaginative glow. At the suggestion of Dr. Stalker he decided to ask George Adam Smith, and the result is well known. His work on the book of Isaiah is the most brilliant and living commentary on the Old Testament ever written, and has been recognized as such by the clergy and the people of every church; in fact, it introduced a new manner of handling the Old Testament in the pulpit.

When Dr. Smith was minister of Queen's Cross, Aberdeen, he had to face the great perplexity of his life. He was called to Edinburgh to be colleague to Dr. Alexander Whyte in Free St. George's, the leading church of the denomination. At the same time he was urged to accept professorships. The claim of Edinburgh upon him was very strong, and it was universally felt in the Free Church that he had commanding qualifications. Nevertheless, he resisted the pressure, and ultimately chose to be Professor of Hebrew in the Free Church College, Glasgow, where he still remains. We believe he chose wisely. He had it in him, no doubt, to be one of the first preachers of the age, but as a professor he has been able to do much work that nobody but himself could have accomplished. It is needless to run over the titles of his books: "The Historical Geography of the Holy Land," "The Twelve Prophets," "The Life of Henry Drummond," and last, not least, "Modern Criticism and the Preaching of the Old Testament." They are in the hands of thoughtful people interested in Christianity through all the English-speaking world, and they are not likely to be superseded while Dr. Smith lives. Genius, it has been said, consists rather in the union of qualities thought incompatible than in the predominance of any one quality. Dr. George Adam Smith is one of the most brilliant men of the day, but he is as accurate as he is brilliant. He is most conscientious in all his literary work, verifies his references, will give nothing to the public unless he can give it with a good conscience. Scholars may have differed from him in opinion; they have never been able to point out deficiencies in his scholarship. With all his width of range, his varied interests, his many friendships, he has kept in close touch with forlorn and friendless humanity. It is characteristic of the man that in Glasgow he is not connected with any great or wealthy congregation, but is an elder in a humble mission church, to which he gives much of his strength and time. He has retained through all his successes his charming modesty, his unflinching sympathy, his affectionate concern in all the joys and sorrows of his friends. A love of all things, he has recognized that he is not merely a scholar, but a minister of the Word of God, and that as a minister of the Word of God he is bound to see that scholarship does not confuse and weaken, but rather strengthen and gladden the church of Christ. He may not have been able to do all that he wished to do—who of us is?—but that this will be his steadfast endeavor in the future as it has been in the past, we have no doubt.—Condensed from *The British Monthly*.

Pick'e-People.

There still seem to be some new descriptives under the sun. Here is one found floating in the current of print, adrift from its mooring, and with the author's name washed off: "Some people are like pickles; a very little of them at a time is quite enough."

Sharp and sarcastic people, critical people, and others who bide their serious selves under the brine of perpetual jest; busybodies in other men's matter, who have now and then a bit of amusing character-sketch to offer; over-sensitive people, with fine traits, but with an acid, touch-me-not flavor about them, all these and a variety of others may be called pickles. There is something good about every one of them, something pungent in what they have to give, and even appetizing if taken as a dash of vinegar is added to a dish. They have a place, but it is the place of pickles in picnic fare. A surfeit would be deplored even there, and as for daily food, what would famishing folk do on an exclusive diet of pickles?

It isn't our business to look about to label pickles where we find them, but to take heed to ourselves. It is a great thing to be of the sort others can live with. If we shrewdly suspect at any moment that a little at a time is enough of our company—we should take ourselves to task at once about the sort we are. The contented spirit, the unselfish, sympathetic, considerate soul, the merry heart that is a continual feast of wholesome fare, should be what we offer to the hungry who will not weary of it. We won't be pickle-people if we can help it—and we can help it if we will.—Julia H. Johnston, in *The Interior*.

While the unloaded pistol goes on slaying its thousands and the ever loaded oil can its tens of thousands there is something else that appears equally as innocent and unassuming that claims victims every year and causes much financial loss and exquisite suffering among men and animals. The instrument of death and suffering referred to is the upturned rusty nail so common around the average farm and in the backyards of country stores. It may seem a very small and simple act to stop and break off or turn down a nail, but that small and simple service may be the means of saving a life or of preventing the most acute suffering the human body can endure.—Home.