

The Telephone.

The following article on this wonderful discovery is from the London Times. Although written in a half playful style, yet it presents what are now well-attested facts, concerning this advanced mode of communication between people and places, more or less distant:

A great change has come over the conditions of humanity. Suddenly and quietly the whole human race is brought within speaking and hearing distance. Scarcely anything was more desired or more impossible. Few, indeed, can fill a room of any size, or even make themselves well heard anywhere; and the ear itself is the weakest and most treacherous of our faculties. The eye enjoyed an invidious superiority over the sister organ. Not to speak of its celestial achievements over other worlds, or of the kingdoms of the earth it could see in a moment of time, it encroached successfully on the domain of the ear, by beacons, and telegraphs, and all kinds of signals. Some of us may remember the line of telegraphs from the Admiralty to Portsmouth, throwing their arms wildly about, ten minutes sometimes, while the bewildered clerks were turning over the leaves of their key or spelling a word. A storm or a fog, or nightfall, would interrupt the message, and there it slept till next day, no matter its importance or its urgency. The railway seemed to compensate for this, but with the railway came all the accidents and delays of a personal agency. Then, about a generation ago, came the electric telegraph, too great a boon to be lightly spoken of, but even more divested of the charms that sweeten and assist communication than the old letter-writing. The writer might be known and loved in his letter, which could not help being characteristic; but the telegram was the dry bones of correspondence. Gushes, sighs, tears, sallies of wit, and traits of fondness do not stand the ordeal of twenty words for a shilling, and the frigid medium of un-sympathetic clerks. All at once the telegram is found to be a barbarous makeshift, fit for business purposes, or mere messages, in which names, figures, places, and dates are all there is to be transmitted. For any higher or tenderer purpose the Telephone is to take its place. While we are talking about it, and hearing of its performances at scientific meetings, the Americans are bringing it rapidly into use. Already 500 houses in New York converse with one another; 3,000 Telephones are in use in the United States; they are used by Companies and other large concerns wherever the works are some way from the office, in waterworks, pits, and mines. Friends on the opposite sides of a broad street converse as if in one room. The known tone and inflections of the speaker, a whisper, a cough, a sigh, a breath can be heard. The little incidents of human utterance which it takes a wakeful ear to detect, aided by the eye and by familiar acquaintance, are found to pass along miles of wire, many of them under the earth or sea. Silent as the medium may be, and dead as it seems, the sound comes out true. A hundred miles of galvanic agency becomes only one imperceptible link between two human mechanisms.

England takes discoveries, when they are not her own, very tranquilly. The Telephone is said to be in use somewhere in this metropolis by two scientific friends, but, while Prince Bismarck has already set it to work on German State business, it can hardly yet be said to have emerged for Londoners from the exhibition room or the *soiree*. Yet it is now plainly nothing more than an affair of mechanism, and, bound as we are to believe in the dominion of man over nature, we cannot doubt we shall master all the material difficulties of this new acoustic problem. The great difficulty at present is the tenuity and feebleness of the result; but it is evident that difficulty has been surmounted in the United States more than it has been here. That may be owing not merely to the density of our atmosphere, but partly also to our imperfect apparatus; possibly, also, to that indistinctness of utterance that slurring over of important consonants, and that dropping of the voice at the end of a sentence, which all foreigners observe in us. The Telephone will prove a severe test of both our speaking and listening powers. The household wire, it appears,

need not be monopolized, or be at the mercy of one inefficient listener. Half a dozen Telephones, with their respective wires, can be attached to the same main wire, and as many ears applied. When it was found, now about fifty years ago, that tubes would convey the human voice sufficiently a hundred yards or more, it was immediately suggested that an honest and attentive body of Christians could stay at home on a rainy Sunday without being deprived of public ministrations. They might sit by their fireside, lend a willing ear to the end of a speaking tube, and hear the sermon delivered at the other end of the street. The voice, however, would not ramify to the desired extent. The electric current will ramify to at least a considerable extent. The very idea of such a use being made of it, improbable and even ridiculous as it is, suggests its convenience for many ordinary and secular purposes. The objection to a telegraphic system ramifying itself into every parish and every good house in the kingdom has hitherto been the fact that in very few households is there one who could read or work the instrument. That objection is now likely in time to be entirely removed. Everybody who has an ear can hear a Telephone, and every one who has a tongue can speak into one. All that is wanted is a much-required improvement in our listening and speaking powers, with, of course, some considerable improvements in the Telephone. But the last point, however necessary, is simply a case of supply and demand. If wanted, the Telephone will be brought to the same pitch of perfection as telescopes, watches, sewing machines, photography, lucifer matches, locomotives, breechloaders, heavy ordnance, and many other things that within living recollection were either very clumsy affairs or not even yet invented. A time is coming when everybody, we presume, will carry his own Telephone about with him. Wherever he goes he will be able to step into a telegraph office, apply his wire to the public wire, and hold a private conversation with a wife, or a son, or a customer, or a political friend, at the end, without the intervention of a public servant. He will pay by the minute. The wire, it is stated, must be a quiet one, for it is apt to pick up stray sound. On the other hand, it is now announced that a remedy has been found for this, and that a wire thus encumbered can be cleared of strange utterances before it comes to the Telephone. Perhaps the use of underground wires, now on other accounts much insisted on, may be found a more effectual remedy.

The discovery has come happily just at the time when there had arisen a dreary feeling that we had arrived at the end of original discoveries, and had nothing to do but work out our old ones. It is true we have been penetrating continents, sounding the deep sea, hunting matter down to molecules, finding perfume in filth, dyes in dirt, and food in refuse. It is also true that the annual catalogue of new facts in Science has been stated to amount to a thick, closely-printed volume. But these are not matters that concern everybody, at least directly. They do not revolutionize the world. What the Telephone promises is hardly short of this. There is no reason why a man should not hold conversation with a son at the Antipodes, distinguish his voice, hear his breathing, and, if the instrument be applied as a stethoscope, hear his heart's throb. Next to seeing—nay, rather than seeing—what would parents give to hear the very voice, the familiar laugh, the favourite song, of the child long separated by a solid mass 8,000 miles in diameter? The telescope is only a prolongation of the eye, and the Telephone is only a second ear. For some time there has been a prophetic idea that a speech ought to be able to report itself. There is now no difficulty in the matter, except that the Telephone will be only too true, and will serve the orator and the public only too well. Will the Telephone be able to convey the singing of our birds to the less vocal tropical regions, the breaking of the surge, or any other of Nature's sweet or wild utterances? Will it bring to our Metropolis the dreadful sounds of the bombardment or the battle-field? But what next? There is hardly anything conceivable

that may not be hoped for, if not, indeed, expected. We have only to look back the length of an ordinary lifetime and consider how much the world has advanced in that period to form a fair estimate of what is in store for our successors. The world has not exhausted itself; mind has not done all its work; Nature teems with fresh wonders; time has more children yet to come. When shall we store and distribute the manifold bounties of Nature running to waste? When shall we counteract the uncertainty of the elements? When shall we penetrate the mystery of the winds? Shall we ever cover the whole earth with fertility and verdure? Shall we not only combat, but extirpate disease, as some diseases have, in fact, disappeared? To come down to the improvement of existing means, when shall we bring railway travelling to the perfection of speed, comfort, and safety? All these are mere mechanical problems. The greatest perfection is not so improbable as the railway itself was only fifty years ago. In none of these matters has mankind yet made so serious and persistent an endeavour as to be sure that the failure is not in itself, rather than in the work to be done. They seem impossible; so did the idea of the Telephone but the other day.

Correspondence.

For the Christian Messenger. From the Rocky Mountains.

THE SAN JUAN MINES.

SILVERTON, Nov. 22nd, 1877.

How little is known in the old-fashioned Provinces of Nova Scotia how business is carried on in the Rocky Mountains. For example, we will take the town of Silverton, which now is but three years old, and has a population of over 3,000 souls, and is located in what is called Baker's Park, one of the several parks found in the Rockies, and surrounded with lofty peaks, making each and every one seem to the eye of the tourist a hidden Paradise, with foaming streams of water jumping and dancing from those lofty peaks and cliffs into the valleys below, which make those ragged cliffs seem to the gold-seeker the pleasantest place in the world.

Baker's Park is two miles long and half a mile wide, and is watered by the Rio Las Animas, (or, River of the Souls) running along the south side of the park and close under the north side of Kendal Mountain, whose peak is 14,500 feet above the sea level, and 5,000 feet above the town, whose altitude is 9,500 feet. The town of Silverton is surrounded on all sides by lofty peaks, such as Kendal, to the south-east, and at the head of the Rio Las Animas is Galina Mountain, which takes its name from a class of ore containing silver and lead, and which is uncommonly plentiful on this mountain. The next, bearing west, is King Solomon, so called from a formation of rock on its peak, resembling a crown. The next is Hazelton Mountain, notorious for its many silver and gold mines and abundance of rich ores. The next is Blair Mountain, from one of the early pioneers, and who owns several rich mines which crop out along its sloping sides. The next and before-mentioned is Kendal, which is the largest and by a few feet the highest in San Juan County. This is not the richest in minerals, but has a goodly quantity of rich ores. Now we have to cross the only outlet or stream leading from Baker's Park, which is a close box canyon (canyon), on to Sultan Mountain, which is the western boundary of Silverton, and which is abundantly rich in ores. Although there never has been as much ore milled from this mountain as from Telgeeton, yet there has been more work done on it. The mines necessarily have to be reached by tunnels, on account of the mountain being so steep that by tunnelling 500 feet to strike a certain vein which runs perpendicularly through the mountain as if a seam were stricken 1000 ft. deep, giving a good chance for what miners call back-stopping, which is by far the cheapest way to work a mine. From the several companies that are at work on it this winter we expect to see an abundance of ore shipped from it during the summer of 1878. We have not space in one sheet to give a minute description of even one of those mountains, so I will pass to the next, which is Round Mountain, noted for fine timber, which would be useful in a Nova Scotia shipyard, but is not of much value here. The next is Tower Mountain, the north-east boundary of the

park, and hardly worthy of note here. Now we have come to the last, but not the least, in the circle, which is bolder and where there has been more gold-bearing leads than all the above-mentioned mountains combined; but is not so rich in silver.

The inhabitants are mostly early-time Californians and Nevada miners, who are always moving forward to the latest discoveries. We have two classes of miners here in the summer time, but one class only now in winter, and these are called "old-timers." The others are called "tender feet," who emigrate from the east in the spring and come to San Juan to make their fortunes in one season. When they get here they arm themselves with a pole, pick, a lead-pencil, and an arm full of stakes. They then run all over the country, locate thirty or forty leads and never take out any ore, and as soon as snow falls, which is generally in October, throw down their pick and pick up the "old carpet bag," and stuff the old duds into it and start off for Kansas, without a red cent to pay their way. Such men in some places are called tramps. As soon as they get fairly out of the mines they are millionaires and trying to sell mining property in San Juan, but four out of five of them never return to look at their property. I have known such abandoned property to be relocated and sold for good round figures, one of them has been yielding up \$5,000 per month all summer.

The way we get our dry goods and groceries into the mines will seem curious to one who has never been an eye witness. The nearest point to a railroad is 185 miles; 160 of that has a tolerably good wagon road. Teams haul over it for 5 cents per lb.; but the other 25 miles of it I will not undertake to describe, as the truth must surely be doubted. Being a Nova Scotian myself, I know what I would think of such a story as could be told of the Sante Christoval range; enough to say that there is a track wide enough for a wagon to pass along, but a wagon cannot be used to transport freight over that twenty-five miles at a lesser cost than 5 cents per lb., and of course nothing comes by waggons except heavy machinery that cannot be carried on the backs of animals. Packing prices are two cents per pound. The animals used are mostly asses, but there are some few mules in use. The round trip may be made with mules in four days; but the asses generally take five. A load for a mule is from 275 to 350 lbs. Asses are seldom loaded more than 150 lbs., and are run in trains of twenty animals, with two men to do the work. The packing season commences as soon as the snow goes off in the spring, about the 1st of May, and is just ended now, when the animals are turned out to pasture for winter. The winter supplies being brought in during the fall months.

Until this season we have had only one reduction works here, and that one has shipped 350 tons of bullion to the refinery in St. Louis. When we say bullion we mean to include all metals. Our metals are principally silver and lead. We have four other mills completed now, ready to start with the season of 1878. Mines have been selling at prices ranging from \$10,000 to \$130,000 each, but the country is still at a loss for want of capital. Most of the mines are owned by poor prospectors who have so many that it keeps them poor doing their improvements on them, as the law requires them to do \$100 worth of work on each mine.

Respectfully, JOHN W. WESTCOTT.

For the Christian Messenger. A Capital C.

In a religious journal it is to be expected that the word "Christian" shall be very frequently used. Hence the greater importance that it be used correctly. In probably a majority of cases in which this word is employed by the religious and secular papers of these Provinces, it is written without a capital C. This may seem to be but a small matter; but it is certainly worth a passing remark.

Is there any standard authority in favor of writing this word without a capital letter? So far as a careful examination of the case has enabled me to form any opinion, I am convinced that there is no such authority.

1. A glance at the passages in which the word occurs in the New Testament shows us that there is, invariably, a capital C used. Still more important is the fact that in the original Greek the same usage is found. The Latin, French, German and other translations have, without exception, so far as I am aware, followed the same example.

2. Both Worcester and Webster, in every case, use a capital letter in writing this word.

3. The general grammatical rule that "adjectives formed from proper nouns shall begin with capital letters," requires that a word formed from the name of Christ should be written with a capital letter.

4. From a painstaking examination of lexicons, magazines, theological and standard religious works, I find that but one usage prevails among classical writers of all denominations, and that usage is in harmony with the New Testament in its original form and in its translations, with our standard lexicographers, and with long-established grammatical rules.

If these are the facts of the case, the use of a small c in the word Christian, or any of its cognates, is eminently unclassical and unscholarly. OBSERVER.

For the Christian Messenger.

Reminiscences of Deacon Sidney Welton.

As Rev. E. O. Read had not a long acquaintance with this valued brother, and wrote a brief notice, in haste, he has requested me to add some further particulars.

Brethren S. Welton and H. Saunders—subsequently ordained to the ministry—had professed faith some time prior to the year 1828. In the autumn of this year they became deeply impressed with a sense of the lamentably low state of vital religion in Lower Aylesford, where they resided. With great timidity they determined to commence holding prayer meetings; and appointed one at Bro. Welton's house. Curiosity seems to have brought together quite a number of people. Providentially Bros. T. Ansley and I. E. Bill, who it appears had been attending an interesting and useful Yearly Meeting in Upper Aylesford, came to the meeting. The former preached an impressive sermon, and the latter gave a thrilling exhortation. A powerful work of grace ensued. The writer has had occasion to refer in many obituary notices to the blessed effects of this "Great Reformation," as it has often been justly denominated. The example of these good brethren in going forward in what might seem at first feeble efforts, is well worthy of abiding record and imitation.

Deacon Welton entertained strong views of the exceeding riches of Divine grace. He was very attentive to public worship, and often spoke with fervour, and to edification, in prayer meetings and conferences. In the last one of these which he attended, only a few weeks before his departure, he is said to have addressed his brethren and sisters with remarkable earnestness and affection, greatly to their comfort and delight. He not only read the scriptures daily at family devotions, but also studied them with evident attention, interest, and profit. As a husband, a father, a neighbor, and a professor of vital godliness, his demeanor was amiable and commendable.

His pious widow states, that the last time he was in any measure able to offer prayer in the family during his sickness, his prayer was extraordinary, as he referred particularly, and with evident earnestness, to his children present and absent, to his Pastor, the Church, and the unconverted. "The memory of the just is blessed."—Communicated by Rev. C. Tupper.

In Memoriam.

Our much esteemed brother

REV. JAMES WILMOT,

has gone home to rest with Jesus. He was a faithful laborer in his Master's vineyard, and believed strongly in "free and sovereign grace." He was converted upwards of forty years ago, and was baptized by the late Rev. Mr. Cunningham, then pastor, I believe, of the Digby Joggins Church. Twenty-four years ago, at the organization of the African Baptist Association, he united