

for example, enlarge our whole conception of the power of actual visual perception, which may pertain to beings less narrowly conditioned than ourselves. (There must be such beings, even if everything is cause and effect, for there are worlds without number, and some at least of them must enjoy higher conditions than our own.) Nor shall we gain much at first from the facts that while flesh is pervious to the "Crookes ray," bone is impervious, and therefore yields its shadow, for the skeleton was accurately known in the days of Galen, and what the doctors want is the power of seeing inside the human body as they can now see inside the human eye. We do not mean in any way to hint depreciation of a discovery which may have far wider bearings than we, who, as regards most sciences, are of the laity, readily perceive, but what interests us is the new receptivity of mankind. Nobody laughs at the account of Dr. Röntgen's studies, or quotes Sam Weller's remark about seeing through a flight of stairs and a deal door, or in any way indicates contemptuous disbelief; rather the wish is to believe and to expand the meaning of the new subject of belief. That is a condition of the general mind very favourable to discoverers, for it exempts them from the heart-breaking necessity, after they have discerned a truth—and remember, there must exist genius in the region of physical inquiry as well as in literature—of inducing other minds, apparently hermetically sealed, to receive it also. For good or evil—and there is evil as well as good in the change—the seals which once closed all minds have been for the most part broken.

It is difficult to avoid speculating for a moment on the line which, if the impression above quoted is well-founded, the next great revelation of science should take. It should not, to fulfil expectation, be, we think, a new application of facts already known. Something which would make it easier to store electric energy, and therefore to use it as a motor without fixed machines, would no doubt double or triple the force at the actual disposal of mankind, and therefore their power of wringing the means of comfort from the reluctant planet, which gives nothing but beautiful scenes except in return for toil. A new means of levitation—scarcely conceivable—would send us all flying through the air, transform all armies and navies, and modify, probably in the interest of the yellow race, which does not mind dying, all existing political combinations. Any means of employing electricity as a weapon might also have great results, as the invention of gunpowder had, though, like gunpowder, it would probably leave the relative position of the nations very much where it was. It is in the struggle of classes that a new weapon would probably do most, all recent inventions having increased the strength of all regular Governments against their peoples. There are conceivable discoveries, too, in medicine, such as a power of illuminating the human body, which would greatly help man in his warfare with disease; and there may exist means of destroying within the bodily system, or permanently preventing the generation of, the hostile microbes. We might learn, in the domain of applied mechanics, how to utilise the colossal force of the tides, the greatest of all unused sources of power except the rush of the world through space; or we might find a new way of easily developing heat so intense that, for instance, we could make of sand a magnificent and comparatively cheap building material. The uses of intense heat, if easily produced, would in fact be numberless. To produce a cooling apparatus, which should have precisely the reverse effect of a fire, and make the tropics a comparatively enjoyable place of residence for white men, is beyond the range of sane imagination; but a refrigerating process which shall add, say, five years to the durability of all food-products is not, and would greatly increase the comfort of the masses of mankind. All these would be great discoveries, but they would not greatly extend the range of human thought or furnish a solution of the problems which perplex investigators. What seems to be hoped for from among the thousands of eager brains now devoted to physical inquiry is the revelation of some hitherto unknown law as extensive in its incidence and as resistless in its operation as the law of gravitation. Suppose we discover a quality in ether, that is, in the something which presumably fills space, which once recognized will enable us to understand why a big solid attracts or pulls a little solid, or possibly why, when a loadstone approaches a needle the latter jumps up, thenceforth to hang to it. Might not that make the universe immediately around us more intelligible, and so directly

increase the pace, and therefore the amount of fruitful investigation? We want, in fact, a discovery which shall in some great department of science simplify the explanation of great groups of fact, and therefore enable us to use those facts as bases for further discovery, with a novel certainty. A discovery which should literally enlarge the powers of the human mind is too much to hope for, but a discovery making the application of those powers much easier—as within a certain range some discoveries in mathematics have done—is at least within the range of the imagination. Whether any such addition will be made to the world's reservoir of thought before the century closes, the greatest savant among us cannot say, but we may venture to record, as Virgil once recorded, a general vague tone of expectation.

A Colonial Incident.

THE LETTERS OF LOUISE DOUCETTE.

PISQUID, June 6th, 1746.

DEAR COUSIN,—

No doubt thou hast long ere this received my letter acquainting thee of my safe arrival after manifold dangers by sea and land; and of the meeting with my father and his French friend.

I have been greatly entertained by the strangeness of this new land; but oft-times my heart turneth sorrowfully to the calm peaceful life with my grandmother at Buxton.

There is such a vast difference between the peace and brotherly love of the followers of George Fox, and the tempestuousness of life here, where methinks, religion is but a vain show. And 'tis a great change to one brought up from infancy in a land free from turmoil and strife to be thus suddenly thrust into a country harassed by war, and whose citizens are full of treachery and bitterness toward England.

Oft times my blood boils with rage as I hear contemptuous words spoken of my dear home and friends.

I am ever too hasty of speech; and oft stand in need of remembering neighbour Grey's injunction, "to weigh my converse" and "bridle my tongue."

Of my father I can say but little. He takes scant interest in me. My childhood and girlhood, passed entirely away from him, and among associations so different from his, have left us nothing in common. He has sternly forbade me mentioning aught of my life in England with my mother's friends, and so I take up my pen to pour out my disconsolateness to thee.

Sometimes I wonder how so grave and stern a man could win the love of such a bright, joyful woman, as I have heard my mother described.

My father had indeed a powerful will to overcome the opposition of church, family, and nationality.

In her early death we have suffered an irreparable loss. I have missed the love, and the fond and earnest care of a mother. And my father for lack of her tender companionship, hath grown into a morose, silent man, in this land of wilderness and savages. Oft-times it puzzles me to find a reason for his sending for me. Methinks it was not affection, for he showeth none towards me. Neither was it for companionship, for sometimes days will pass, in which he acknowledges my presence and salutation by the merest outward courtesy.

My heart misgives me, the reason I am here, is at the instigation of Abbe La Loutre, who would tremble to see a "daughter of the Church" under the influence of English heretics.

'Tis wonderful the power this man has over those who are near him. I avoid him, and am loath to hold converse with him. But 'tis strange, that many things, to which at first I object most strenuously, by slow degrees, and sore against my will, he makes me do.

PISQUID, June, 1746.

This is a fair land, with broad marshes, fruitful fields, and great orchards of apple and cherry trees now in full bloom; and as I write, the evening air comes puffing in through the casement, laden with sweet perfumes.

Sometimes I think there may be a connection between the turmoil of those who dwell here and nature itself. Everything seems stronger and quicker than at home. I have found it thus in animal and bird life.