

their manifestations in the most distant parts of the earth, but embraced as a whole it may be within periods too great to have yet been comprehended in the range of time over which the longest series of magnetic observations have extended. It may be that the full significance of the phenomena now being recorded in the Toronto Magnetic Observatory will only be understood when their normal progression completes a larger cycle, not of years but generations; and other centuries shall, by our aid, perceive the compass of great general laws. The relations already traced between magnetism, electricity, light, heat, and mechanical force, and all the singular glimpses of thermodynamics reducible to well-established laws by known mechanical principles, manifestly point to future disclosures of some comprehensive truth, as simple, yet perhaps even more wide-embracing than Newton's law: a grand law of the universe that shall indicate long concealed relations between that vital force which is controlled by mental volition and animal instincts, and the mechanical forces which control inorganic matter, and bind suns, and planets, and systems into one.

Thus do those little-headed labors of our magnetic observers unite us as fellow-workers with the noble phalanx of intellectual toilers, whose far-reaching thoughts and speculations wander through unilluminated vistas of the coming centuries, and search for revelations of truths which the angels desire to look into; and the full significance of which, I doubt not, the spirits of just men made perfect rejoice to employ their renovated powers in mastering. But, while thus standing on

"This narrow isthmus 'twixt two boundless seas,
The past, the future, two eternities,

man—unconsciously stimulated by his immortal destiny,—desires to look into the unseen truths of a great future; it is also with no less characteristic zeal that he indulges in a wise retrospection; and in this also we have our indefatigable Provincial phalanx of workers. The two Decades illustrative of Canadian palæontology, issued during the past year by the Geological Survey of Canada, minutely illustrate and describe evidences of life pertaining to formations dating within that primary palæozoic period in which the Geologist recognises the oldest traces of organic structure, at an epoch, the remoteness of which he dimly guesses at by hundreds of thousands of years. And of what use is it for us to learn of those long-perished