

— Thomas Whittaker has just published a new edition, with some changes, of Miss Anne Ayres' "Life and Work of William Augustus Muhlenberg."

— Mr. Warren K. Moorehead announces a new work on Ohio Valley earthworks. This work contains 41 full page illustrations made from photographs taken in the field, and a detailed account of exploration in the mounds and graves of Fort Ancient.

— Messrs. Ginn & Co. announce as ready, "Elementary Mathematical Tables," by A. Macfarlane, D.Sc., LL.D., professor of physics in the University of Texas. This collection of tables contains logarithms, antilogarithms, addition logarithms, subtraction logarithms, logarithmic sines and cosines, logarithmic tangents and cotangents, natural sines and cosines, natural tangents and cotangents, natural secants and cosecants, arcs, reciprocals, squares, cubes, square roots, cube roots, circumferences, circular areas, spherical contents, powers, constants, hyperbolic logarithms, exponentials, divisors, least divisors, interest tables, first nine multiples of numbers up to 1000, with a large number of auxiliary tables. The tables are mostly four-place: they have a uniform decimal arrangement similar to that of seven-place logarithmic tables; they are mostly synoptic, are provided with differences and proportional parts, and are arranged so that the function may be read off for any position of the decimal point in the argument. The tables are designed to be useful not only in computing and in the graphic method, but also in the teaching of arithmetic and in the illustration of the theorems of algebra.

— Mr. Gordon L. Ford of Brooklyn has in press a number of interesting unpublished agreements between Washington and his overseers and workmen, throwing much light upon the management of his estates, as well as on the "labor question" of colonial Virginia. The agreements are copied from the originals in Washington's writing, and all date before the Revolution. In this volume will also be included a correspondence that Washington had in 1774 with a number of merchants and others, concerning a scheme he entertained of importing German Palatines to settle upon his western lands, and one of Washington's advertisements for runaway servants. Very little of this material has been published heretofore, and "Washington as an Employer and Importer of Labor" will present a new phase of his character. The edition will be limited to five hundred copies.

— M. Rénan is at work on the fourth volume of his "History of Israel." He is also correcting, says the New York *Tribune*, the proof-sheets of a new book to be entitled "The Future of Science." It is an essay entirely written as long ago as 1848, and deals, among other topics, with the theory of development subsequently enunciated by Darwin. In various other matters M. Rénan is shown to have anticipated subsequent discoveries in the fields of knowledge, and to have indicated the general direction to which science was tending. He has neither added to nor excised a single passage from his earlier essay, the only alterations introduced being those of style.

LETTERS TO THE EDITOR.

*.*Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

Electric Eccentricities.

DURING the great fire that raged over northern Wisconsin in 1871, and which wiped out not only the prosperous village of Pestigo, but, in the aggregate of farmhouses, half a dozen villages like Pestigo, there were many evidences of electrical phenomena present. The flames were seen to possess that sudden rapidity of action which only electricity can impart. They would leap over wide spaces with the greatest rapidity, leaving many objects in the rear that one would suppose could not escape, and striking others beyond, and least exposed, in the most unaccountable manner. The details of that great disaster would disclose many curious and

instructive facts. People were found dead without any apparent injury, though lying out in the open fields, and far from the burnt woods. Of course, it is popularly supposed that these suffocated in the superheated atmosphere. However that may be, one circumstance coming under my own observation proves conclusively the presence of electricity, and a very curious action of the subtle fluid, too. Shortly after the fire, the editor of the Green Bay *Advocate* exhibited a copper coin taken from the pocket of one of the victims found dead in the middle of a large clearing. The coin was fused, but no sign of injury whatever was discovered on the man's person.

GEO. GIBSON.

Hudson, Wis., Oct. 22.

[Is it not possible that the coin was fused before it went into the unfortunate man's pocket? — ED.]

A Lightning Discharge in Quebec.

As you request observations of lightning, I take occasion to send you some made by myself. On the 29th of June, 1887, a violent thunder-storm broke over Quebec about six o'clock in the evening. The wind was blowing from the west. At Levis, opposite Quebec, a church was being built at that time, and the wood-work of the tower had just been finished. The roof was finished, and it was covered with galvanized iron. This sheathing was connected by lightning-rods with the earth. The first fall of rain wet the west portion of the tower; and, in an instant after, the lightning struck the tower, leaving intact the east portion, but shattering completely all those parts of the wood rendered semi-conducting by the rain. After reaching the metallic covering of the roof, the electricity was probably conducted by the rods to the earth, as no further trace of it could be found. The great beams of the wood-work had been broken by the discharge, and the wood in great part splintered. The annual rings had separated one from another without any trace of carbonization.

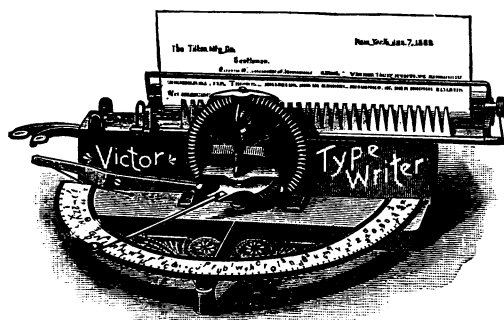
J. C. K. LAFLAMME.

Quebec, Oct. 20.

INDUSTRIAL NOTES.

The Victor Type-Writer.

A FEW years ago there was only one type-writer on the market; but such has been the activity of inventors, that there are now a score or more to be had, so that the most varied tastes in type-writers may easily be satisfied. The older and better-known key machines, familiar in all business-offices, still maintain their leader-



ship, though they are closely followed by machines of more recent invention. The most recent of these key type-writers was described in these columns a few weeks ago.

In some of the key-board machines there is a key for each character, as the Caligraph, the Yost, and the Automatic. In others a shifting or changing device gives two or three characters for each key, as the Remington, the Hammond, and others. The keys on these machines, therefore, range in number from thirty to eighty or more.

There is another class of type-writers in the market, without a key-board, in which the character to be printed is first sought out