means of machinery, instead of hand labor. The most skilful workman, setting up type by hand, does not exceed a general average of about 40 lines per hour, or a maximum rate of 50 lines per hour during short peroids of great pressure; but the machine used by the Times. in which the types are brought down and placed in position by striking upon keys something like those of a piano or organ, enables a fair workman to obtain an average speed of 100 lines an hour even when composing from manuscript, which he has to read for himself; and this speed can be doubled, or nearly so, when the operator is assisted by a reader, and thus composes from dictation. The original form of the machine was introduced soon after the Franco-German war, and has ever since been undergoing such modifications in detail as experience has from time to time suggested, until it has now reached a state of very great efficiency.

CROSS'S ECLECTIC SHORTHAND.

The "Eclectic System of Shorthand" is the title of one of the modern American systems of Phonography cast upon the tender mercies of a critical phonographic world, its author being J. George Cross, A. M., of Chicago, Ill. The instruction book, a well-printed work of 300 pages, explains and teaches the system in a very lucid manner. Mr. Cross claims for his alphabet that as it is deduced from the inclined ellipse the characters are the easiest possible lines to exe-They represent the same powers as the English alphabet. No heavy lines are used, except for r, which is added to any other line of the alphabet by making it heavy, thus combining two letters in one line. Both vowels and consonants are represented by full lines. oblique lines are capable of being written either upward or downward, thus preserving the horizontal character of the writing. The system comprises three styles of writing: the full corresponding or business style, the abbreviated corresponding style, and the reporting style. The latter possesses a comprehensive series of prefixes, affixes, abbreviations and phrases, which, Mr. Cross says, will answer the fullest demands of verbatim reporting. This system, although comparatively new, can boast of a respectable number of adherents, some of them being experienced reporters, who speak in high terms of its advantages. S. C. Griggs & Co., Chicago, are the publishers of "Eclectic Shorthand," and the price is \$2.

AMONG THE MAGAZINES AND BOOKS.

A Synopsis of Standard Phonography is another work just issued by Mr. Graham. It is adapted to the use of classes and private students of the Standard system. In addition, it contains reading exercises, and lists of wordsigns, contractions, phrases, etc.

The Shorthand Review is a spicy little quarterly published at Cleveland, Ohio, by Wolfe & Fracker, in the interest of Scovil's system. It contains some interesting reading matter in

common print, together with several pages of lithographed shorthand.

Brown's Phonographic Monthly for June contains a portrait and sketch of J. W. Love, lately of Edinburgh, together with a fac simile of his reporting notes; a number of interesting communications, and a variety of excellent reading matter.

Prof. A. Melville Bell, of Brantford, Ont., has favoured us with his works on his system of stem-phonography published in Edinburgh a few years ago. An excellent series of books were issued explanatory of his system.

Brief Longhand is the title of a recent work issued by Andrew J. Graham, Bible House, New York, the author of Standard Phonography. As its name implies, it is a system of longhand contractions, and will be found to be a very useful expedient for speedy transcription.

Among the English magazines we have received, we find the *Phonograph*, a weekly shorthand literary magazine. This shorthand is well printed, and the articles are very readable and interesting. The publisher is M. Hurst, 23 Church street, Sheffield. *The Phonographer's Herald* is a monthly production, containing high-class literary articles. A portion of the *Herald* is written in the briefest style of Isaac Pitman's system. It is issued by J. Butterworth, South Shields. The *Meteor* is the only illustrated monthly issued in Great Britian in shorthand. The articles (all original) are cleverly written, and the illustrations are attractive. C. J. Payne, 24 Ambrose street, Derby, is its editor.

ANCIENT WRITERS AND AUTHORS.

By James E. Munson.

It is said that the first shorthand writer was one Marcus Tullius Tiro, the freedman of Cicero, and that by means of his invention some of the finest specimens of Roman oratory have been preserved to us. Seneca, the Stoic phonographer, who lived a century later, is said to have added five thousand characters to those of Tiro. Two hundred years after that, Cyprian, the Bishop of Carthage, put the finishing stroke to it by the addition of many notes, which rendered the work "much more useful to the faithful.'' For more than five hundred years, "Tironian notes" were in great favour with the learned, but they finally died at the hands of an The great Justinian "forbade the text of his Codex to be written by the catches and short-cut riddles of signs," although it is believed by some that the Tironian shorthand was superior to anything we now have. The fact is that it is very doubtful if it was capable of doing any very rapid verbatim work. I infer from a passage in the "Life of Cato the Younger," that, in order to get a full report of a speech, it was necessary to have several writers taking notes at the same time, so that what was lost by one could be caught by another, and that the combined notes of all the