

So very hasty a sketch of an important theory is necessarily unsatisfactory. It may serve, however, to call attention to the fact that a change in our view of crime and criminals seems about to take place.

The several interests involved in this change of view are many and important. When a chemist is called to court to give expert testimony, the law accepts the results of science as final; but when the doctor testifies, it is at once evident that the medical and legal points of view are essentially different, and in conflict with one another. The law is interested only in the question of responsibility, and demands a 'yes' or 'no' when a truly scientific answer cannot be given in that form. A medico-legal case almost always presents strange inconsistencies. The law should certainly be as ready to accept the testimony of science from the doctor as from the chemist, and should remember that they may both be equally valuable though not equally definite. If such views as these urged by Dr. Lombroso ever become the guiding principles of the law courts, a great and beneficial change in the treatment of alleged insane criminals is sure to follow. Our knowledge of these marked classes is becoming sufficiently accurate and scientific to warrant a practical application of these views in the legal trials, and a theoretical appreciation of them in our theories of ethics.

J. JASTROW.

ANNALS OF THE CAKCHIQUELS.

THE above forms the sixth volume of the editor's 'Library of aboriginal literature,' and contains a portion of a manuscript termed by Brasseur de Bourbourg, its former proprietor, 'Mémorial de Tecpan Atitlan.' Its language is the Cakchiquel dialect of the wide-spread Maya family: it was composed by various members of the Xahila (a clan or family once ruling among that tribe) during the sixteenth century, and brought into its present form, as Dr. Brinton assumes, between 1620 and 1650. Only that half of the manuscript was published by him, with translation, which refers directly to the legendary and documentary history of the tribe.

There are three ways open for the publication of linguistic manuscripts of this sort. The first is to print the text, *tel quel*, with all its faults and inconsistencies; the second, to emend the faulty text according to the grammatic laws observable in the language, and to place the readings of the original, where they differ from the corrected forms, on the lower margin. A third mode of

The annals of the Cakchiquels. By DANIEL G. BRINTON. Philadelphia, Brinton, 1885. 8°.

proceeding, and the most scientific of all, would be to embark for Guatemala, and there to compare the old text with the pronunciation and wording which the actual Cakchiquels would give to it. This would enable the editor not only to present the text in a scientific alphabet, but also to add a correct translation to it.

But none of these three courses was followed by our editor. The inconsistent orthography of the original prompted him to adopt the first two courses simultaneously and eclectically, and thus he succeeded in producing confusion in the text. His excuse (p. 63) is, "I have felt myself free to exercise in the printed page nearly the same freedom which I find in the manuscript. At first, this will prove somewhat *puzzling* to the student of the original. . . . In the punctuation I have also been lax in reducing the text to the requirements of modern standards."

Not less unfortunate than this method is the incorrectness of his proof-reading; for on p. 107 we find the proper name *Vookaok* correctly written, but on p. 110 he prints it *ahauh voo kaok*; the adverb *mahaniok* (p. 66) appears in the vocabulary as *mahanick*; the Greco-English term *allophylic* (p. 196) as *allophyllie*; and in two French quotations from Brasseur's translation he finds himself prodigiously at variance with French accentuation (pp. 197, 206). The appended 'Notes' convey very little information on grammatic or other subjects which we have to know before we can understand the text, and the condition of the vocabulary is very unsatisfactory. We look in vain for the terms *petebal*, *navipe*, *onohel*, *g'anel* (the name of a month); and even some of the frequently occurring numerals, as *vuo-o*, *voo* ('five'), are not entered. The translation is a mere paraphrase full of gaps, and the text as printed does not by any means render justice to its highly interesting contents, which, in their historic importance, are second only to those of the Popol Vuh.

PROFESSORS AYRTON AND PERRY, the English electricians, have accidentally observed that on amalgamation, or coating with quicksilver, brass expands; so that, if one side only is amalgamated, a plate of brass becomes curved. They imagine that this may be the primary cause of the phenomena of the Japanese 'magic mirror,' which has cast on its back a pattern that is quite invisible on the polished face, yet is mysteriously distinct in the patch of light reflected by the mirror upon a screen. Amalgamation would affect the thinner parts made by the pattern more than the rest of the plate, giving the mirror the imperceptible unevenness that becomes plainly apparent in the reflected image.