

SCIENCE.

FRIDAY, OCTOBER 29, 1886.

COMMENT AND CRITICISM.

A GOSSIPY WRITER in the *Nineteenth century* magazine has given us an interesting article on what girls read. He refers, of course, to English girls, but most of his data and all of his conclusions suit our young women quite as well as their British cousins. He shows that authors for girls have been developed, and form quite as distinct a class as Reid, Verne, Hughes, and others who write primarily for boys. Among this class he enumerates Mesdames Alcott, Dodge, Marshall, Banks, Browne, Beale, Symington, Owen, Sewell, Wetherell, Holmes, Meade, and Yonge. To Miss Alcott the writer himself awards first place, and speaks very highly of her books. He finds that an unnatural tone pervades much, if not all, of the current literature for girls, and says its teaching may be summed up thus: "If you are wicked, you must reform; and when you have reformed, you will die." Good biographies, he continues, form the best reading for girls, for "fiction should lend relief to girl-life, biography should impart high-principle and poetry grace." Some interesting statistics are appended to the article, being made up from answers by one thousand girls between the ages of eleven and nineteen.

The answers to the two questions, 'Who is your favorite author?' and 'Who is your favorite writer of fiction?' are added, together with the following result, those names receiving fewer than five votes being omitted: Dickens receives 330 votes; Scott, 226; Charles Kingsley, 91; Charlotte M. Yonge, 91; Shakspeare, 73; E. Wetherell, 54; George Eliot, 41; Lord Lytton, 41; Longfellow, 31; A. L. O. E., 30; Canon Farrar, 22; Thackeray, 18; Verne, 16; Macaulay, 13; Miss Alcott, 12; Mrs. Stowe, 11; Tennyson, 9; Carlyle, 6; Ruskin, 6; Charlotte Brontë, 5. The above, being the vote received by the principal authors, is curious in several respects. First, it is odd that authors whose works are classic should so far outstrip those who appeal especially to a girl audience. This may be explained either by saying that the girls put down names of authors whose works

they knew they should read rather than those whose works they actually do read; or it may be that the parents and teachers generally recommend such authors as Dickens and Scott, and that their advice is more generally followed than is usually believed. Again, it is curious to see Longfellow so far ahead of Tennyson, Carlyle, and Macaulay, in a list made up by English girls.

THE QUESTION HAS OFTEN been asked, For what purpose were mosquitoes created? Dr. Finlay of Havana seems to have answered the question, in part at least, by announcing that the mosquito is one of the active agents in the spread of yellow-fever. The doctor's theory is, that the sting of the insect, after penetrating the skin of a yellow-fever patient, retains on its exterior the germs of the disease, which may thus be conveyed to the next person it attacks. As a result of his study, he finds that every mosquito that stings may be considered a fecundated female, and will probably deposit its eggs within a few days after its bite, provided it can find water in which to deposit them. The young mosquito will be developed in about three weeks. As the eggs are deposited in the locality where the female stung its victim, the young would also be produced there, and, finding the yellow-fever patient near by, would sting him, become infected, and carry the germs to other human beings. Dr. Finlay believes that yellow-fever is not transmitted through the air nor by contact, but by inoculation, largely by means of the mosquito. He regards the disease as incapable of propagation wherever tropical mosquitoes do not or are not likely to exist; ceasing to be epidemic at the same limits of temperature and altitude which are incompatible with the functional activity of the insect, and spreading wherever the mosquito abounds. Dr. Finlay reports, as confirming his views, that in the summer of 1885 mosquitoes were scarce in Havana, but were very numerous in the autumn, and that, although the summer was unusually hot, yellow-fever cases were few in number, but in October and November increased considerably. The subject which has been thus brought to the attention of medical men and sanitarians is one which, it would seem, admits of

proof or disproof; and the experience of others practising in regions where yellow-fever prevails will doubtless elucidate the question.

IF, AS MANY THINKERS CLAIM, the chief philosophic interest in England now centres about psychology, the current issue of *Mind* cannot be cited as evidence to the contrary. It is distinctly psychological. Professor Bain writes approvingly of Mr. James Ward's *Encyclopaedia Britannica* article on 'Psychology,' though, of course, mentioning his points of difference from the Cambridge professor. Professor Bain's argument, that a series of states can be aware of itself, seems to us very weak and inconclusive. The president of the Aristotelian society, Mr. Shadworth H. Hodgson, takes up the articles by John Dewey of Michigan university, which appeared lately in *Mind*, and attacks them vigorously as based on 'unwarrantable assumptions.' Mr. Hodgson has no difficulty in making out a case. The following article on Hegel's conception of nature, by S. Alexander, is far more clear and interesting than expositions of Hegel usually are. Dr. Cattell continues the record of his psycho-physical experiments, treating now of will-time and of the influence of attention, fatigue, and practice on the duration of cerebral operations. Joseph Jastrow records his investigations into the perception of space by disparate senses. The book reviews are as full and valuable as usual.

THE DEGREE TO WHICH the medical charities are abused in this country is beyond computation. Hospitals and dispensaries which were organized for the relief of the poor are daily thronged with the well-to-do; and even the rich do not scorn to take advantage of the services of the physicians which can there be obtained gratuitously. It was recently estimated that about one-fourth of the inhabitants of Boston were receiving medical treatment free; in London and New York the proportion is about the same; in Philadelphia it is one-fifth; and in Liverpool, 298,320 persons in a population of 579,724, or more than one-half, are, according to the *British medical journal*, receiving free treatment in their illness. The writer knew of a case in one of our large cities where a lady came to a dispensary for treatment in her carriage, leaving it a block away, and walking that additional distance. Physicians on duty at these places not infrequently learn that their patients have been spending a portion of the summer at

Long Branch or in the Catskills. Dr. F. F. Doggett of Boston read a very interesting paper on this subject before the Massachusetts medical society, calling attention to the abuse of the present methods, and suggesting a plan for their improvement based upon practical experiments of his own in this direction, which have been carried out with success since 1883. Briefly, his plan consists in ascertaining the financial condition of the applicant, and, if he finds him able to pay for treatment, to refuse to prescribe for him at the dispensary. Dr. Doggett has found that this plan has reduced to a minimum applications from those whose means will permit them to employ a physician at their own homes, while at the same time it has not prevented the relief of the poor, and indeed has been greatly to their advantage by permitting the physicians in attendance at the dispensaries to give them more time and attention. Dr. Hall, of the northern dispensary of New York, has followed a somewhat similar plan, with like results. Dr. Derby of Boston, in speaking of the methods to correct these abuses, says, "The solution of the whole matter seems to me so simple that I mention it with diffidence. It is but to accept the principle that the out-patient department is for the benefit of those whose lack of means would prevent their obtaining relief elsewhere, and to leave the application of this principle to the physician in attendance. When any thing in the dress, manner, or statement of the individual causes hesitancy to be felt, a few questions, put with tact and kindness, will readily resolve the matter; or, if any doubt should still be felt, the applicant for aid should certainly receive its benefit." The evils of this gratuitous treatment to those who are able to pay are many, not the least of which is the effect upon those who receive it, lessening their self-respect, and causing them to look about for gratuitous assistance in other directions. If a central bureau could be established to investigate the claims of all applicants for free dispensary treatment, much good would be accomplished. Unless this was done, or some plan generally adopted, the rejected ones would apply at other dispensaries and be treated there.

THE *Meteorologische zeitschrift* (Berlin) for June contains a note by Lieutenant Sobieczky of the Austrian navy on the meteorological stations in the West Indies, which he had opportunity of visiting. Mention is made of the former establishment of stations during the hurricane months of

the autumn in connection with our signal service, now mostly abandoned by reason of an unfortunate and unwise economy. The more important existing stations, fitted with good instruments and in the care of good observers, are as follows: Havana, Cuba, at the Jesuit college, in charge of Padre Benito Viñez; Kingston, Jamaica, in charge of Prof. Maxwell Hall; Port au Prince, Hayti, directed by Jesuit priests; two in San Juan, Porto Rico, one controlled by the government, the other in a Jesuit monastery. Besides these, there are records of less detail kept at Santiago, Cuba, and on the several English islands; but they are not published in good or easily accessible form, if published at all. Considering the direct importance of uniform series of observations on the Antilles, especially during the hurricane season, and the probability that observers could be found there if instruments could be supplied to them, the field commends itself to international cultivation; and in time we trust to see our hydrographic and signal offices taking the lead together in this work, to which other nations will undoubtedly contribute a valuable assistance.

THE LEGISLATORS of European countries seem to be ever on the alert to devise means by which the general health and vigor of the youth may be increased. While it may be true that the real motive which actuates these efforts is not a philanthropic one, but is rather with the idea of raising up material for an army with which to defend the fatherland or to carry conquest into other countries, still the end which is reached is a most beneficial one. By a law recently enacted in Germany and Switzerland, the principals of all schools are required to dismiss their pupils at noon of every day on which the thermometer registers, at 10 A.M., 20° Reaumur (77° F.). We commend this action as worthy of reproduction in this country to those who, during the coming year, will serve in our state legislatures.

THE PRELIMINARY ACCOUNT of an analysis of the Mexican codices which appears in this number of *Science* aroused an unusual interest in the section of anthropology at the recent meeting of the American association. All previous attempts at deciphering these queerly artificial systems of picture-writings were confessedly inadequate; and the principle of ascribing a phonetic value to the characters, and not a merely symbolic one,

is as rich in its consequences as it was unexpected. It is highly improbable that a method of interpretation yielding such definite and rational results even in a small number of instances should not be the key to a large portion of the writings; just as improbable, for example, as that a thousand letters of a printer's 'pie' should happen to form rational sentences. Moreover, the discovery of the determinative signs does much to complete whatever gap may have been left in the evidence. Linguists and anthropologists alike will await with anxiety the results of the application of this promising innovation to the mysterious remains of Mexican thought and customs.

TECHNICAL EDUCATION.

It is pleasant to notice that the subject of technical education and manual instruction in connection with the public-school system is being actively and favorably discussed in New York City. The board of education some time ago appointed Messrs. Dewitt J. Seligman, Henry L. Sprague, and E. J. H. Tamsen a special committee to make a report on the subject of technical education, and on Oct. 13 their report was received and discussed by the board. The report emphatically favors the introduction of manual training into the public-school system, and points out that it may be accomplished in one of two ways: first, separate schools for manual training may be established; or, secondly, it may be made part of the regular course of study, as now pursued in the various schools. Inasmuch as the superintendent of school buildings reported that there were vacant rooms in various schools, the committee was of opinion that mechanical or constructive drawing, modelling in clay, wood-working by means of hand-tools, etc., could be taught immediately, such vacant rooms being used for the purpose. To carry out the proposed experiment in male grammar schools, the committee asked the board of education to apply to the board of estimate and apportionment for an appropriation of fifty thousand dollars.

The manual training of girls was not overlooked by the committee, and an additional ten thousand dollars was asked for in order to introduce experimentally into the female grammar schools instruction in elementary cooking (twelve lessons, of two hours each, would suffice, in the committee's opinion), instruction in sewing (sewing is now compulsory one hour a week in the primary schools for girls), and to provide for courses of lectures to the older girls on the elementary rules of housekeeping. Some discussion arose concern-