

of the title. A rather meagre text is fully illuminated by illustrations, mostly from standard works, although a few are original, so that a good teacher may find the book useful. In the "First Course in Biology" (the Macmillan Co.) are brought together with separate paginations a "Plant Biology," by L. H. Bailey, and an "Animal Biology" and a "Human Biology," by W. M. Coleman. The book is declared to be an effort to make elementary instruction in these subjects more "applicable." The result is not very convincing, but in these matters everything depends upon the teacher.

In "A Text Book of Experimental Chemistry (with Descriptive Notes), for Students of General Inorganic Chemistry" (Philadelphia: P. Blakiston's Sons & Co.), Prof. Edwin Lee, of Allegheny College aims to combine experiment and theory in due proportion, to devote more attention than usual to the energy side of the subject, and to introduce the newer theories of equilibrium and dissociation. But the fulfillment of this purpose is disappointing; for the book does not differ in scope and character from several others on the market, and it has some faults of its own, the chief of which are confusion in arrangement and clumsiness of wording. Why should the beginner in chemistry be met on the first page with the question whether matter is merely a product of thought, a manifestation of energy, or a cause of sensation? No sufficient explanation is given of what these different definitions mean. They are simply set down with the cautious conclusion, "Science seems unable as yet to predicate what matter is." The volume abounds in misprints and inconsistencies and disregards the ordinary rules of grammar to an extent unusual even in scientific text books. In one chapter "Hydracids" and "Oxacids" are discussed and these are duly indexed. Another chapter refers to compounds of strikingly similar formula to the latter as "Oxacids," but this is not indexed, so it seems likely that the first word is merely an allotropic form of the second.

Among recent mathematical works from the Cambridge University Press are "A Course in Pure Mathematics," by G. H. Hardy, the second volume of Prof. G. H. Hardy's "Scientific Papers," and "The Thirteen Books of Euclid's Elements," by T. L. Heath. Of these works (all of which are published in America by G. P. Putnam's Sons) the first begins with a detailed analysis of the linear continuum, and culminates in the theory of the logarithm and the exponential. Designed for first-year university students, and intended to be read in connection with the usual text-books of analytical geometry and the calculus, it is chiefly notable for the omission of many of the usual topics, as, for example, the principle of convergence, for extraordinary emphasis on such regulative ideas as infinity and continuity, and for the deliberately prolix and multilateral treatment of them. The nine memoirs contained in the second volume of Darwin's "Papers" all deal with questions of tidal friction and its cosmogonic effects. To the mathematical astronomer they are of especial interest as giving the latest and best word of mathematics respecting celestial evolution. No mathematician, unless quite without historical and philosophical sense,

can fail to be delighted with Mr. Heath's edition of Euclid. For it is not merely the first and only English translation of the famous "definitive MS." of Heiberg, but in three beautifully printed volumes it brings together in a most masterful exposition the results of critical inquiry from pre-Euclidean times down to the very latest European researches in the foundations of geometry. It is indeed a work that neither geometrician nor philosopher can afford to ignore. A specially commendable feature of Daniel A. Murray's "Differential and Integral Calculus" (Longmans, Green & Co.)—a respect in which most of its rivals are lacking—is the citation, in connection with important or difficult ideas, of standard works dealing with them. To be able to say of a secondary school book of mathematics that it is fresh, teachable, and sound is indeed rare, and it is, therefore, a special pleasure to be able to say these things of Prof. E. R. Hedrick's "Algebra for Secondary Schools" (American Book Co.).

The subject of physics has gradually increased in favor with teachers in the secondary schools. We have now associations of teachers, who hold yearly meetings to discuss proper methods of presenting the subject. Unlike chemistry and botany, physics demands more or less complicated and expensive apparatus, and it is therefore the constant endeavor of writers of text-books to suggest experiments that may be within the means of the ordinary school. Two of the most recent works are "Elements of Physics," by Prof. George A. Hoadley of Swarthmore (American Book Co.), and "Physics for Secondary Schools," by Charles F. Adams of the Detroit Central High School (American Book Co.). One will find it difficult to choose between these treatises. Both are intended for recitation work, and the performance by the student of qualitative experiments. Problems are given, but they are not connected with quantitative study. Both treatises have the merit of being compact. The "New Laboratory Manual of Physics," by S. E. Coleman of the Oakland High School, is what its title indicates. At the beginning of each class of experiments it gives references to text-books by various authors. One is surprised not to see any reference to the Harvard descriptive list of physical experiments which have had an important influence on the establishment of laboratory courses in secondary schools; yet one finds in Mr. Coleman's experiments suggestions from this list. We may add that there is a growing conviction among college instructors in physics that students preparing for college would be better fitted for the future study of physics if they devoted their time to trigonometry in the preparatory schools rather than to laboratory work. "A Text-Book of Physics," edited by A. Wilmer Duff (Philadelphia: P. Blakiston's Sons & Co.), is the combined work of Mr. Duff, Karl B. Guthe, William Hallock, E. Percival Lewis, Arthur Goodspeed, A. P. Carman, and R. K. McLung, and it has the merits of such co-operation. It is an excellent reference book for college students and takes the place of Ganot's "Physics," which has been a useful book in the past. "Electricity, Sound, and Light," by Prof. Robert Andrews Milliken of the University of Chicago and John Mills of Western Reserve, is called by the authors a short university course,

and it promises to be a useful book in elementary college courses.

"Alternating Current Machines," by Samuel Sheldon, Hobart Mason, and Erich Hausman (D. Van Nostrand Co.), is a compact elementary treatise on a rapidly growing subject. It is lucid and moderately free from full-page illustrations of dynamos which can be described equally well by small diagrams—much to the profit of the pocket of the student. "Applied Mechanics for Engineers: A Text-Book for Elementary Students" (The Macmillan Co.), by Prof. E. L. Hancock of Purdue University, is a modest but sound work which will be welcomed by students of engineering.

#### MORE CARLYLE LETTERS.

*The Love Letters of Thomas Carlyle and Jane Welsh.* Edited by Alexander Carlyle; with numerous illustrations, two in color. 2 vols. New York: John Lane Co. \$8-net.

At the end of May, 1821, Edward Irving took Carlyle from Edinburgh out to Haddington to visit Jane Welsh. From that visit, Carlyle, as he wrote to his brother, "came back so full of joy" that he had "done nothing since but dream of it." Four days after his return he sent his first letter to the young heiress, as he regarded her, with directions for her reading and with excited allusions to the "few Elysian hours" they had spent together. It was the beginning of a correspondence which closed with a letter from Carlyle, dated October 9, 1826, a week before their marriage. These love letters between the two, preserved almost intact, were in the hands of Froude when he wrote the *Life*, and were interpreted and excerpted by him in a manner that was to bring on an Iliad of woes. In the "Early Letters of Thomas Carlyle," published by Professor Norton in 1886, a few of the letters were printed with the design of correcting Froude's misstatements, but the collection as a whole he regarded as "too sacred for publication"; and, indeed, Carlyle himself had left an injunction to this effect. Now, after long hesitation, Carlyle's nephew, feeling that the sacred trust was long ago violated by Froude, and that the finest service to the dead could be done only in this way, gives to the world the, practically, complete correspondence.

So far as mere interest goes, these two thick volumes will be a disappointment to readers who know the writers from Froude and from their other letters. There is something in the very *genre* of love letters that makes for dullness, and not even Thomas Carlyle and Jane Welsh could entirely overcome that tendency. Nor are the reasons for this rule hard to define. Such letters are commonly the product of youth—respectively twenty-six and twenty were the ages of our lovers at the beginning—whereas the real epistolary charm is rarely attained before full maturity.

Good letters must be personal, yet the writer must at the same time stand apart from himself, so to speak, with a kind of amused or disillusioned indulgence in his own egotism; their style must be entirely spontaneous, yet adjusted to the nicest effects. Such a combination no writer is likely to possess until well along toward middle life; for a young man is too serious about his future, an old man too conscious of the waning of his powers. And in love the anti-epistolary faults of youth are all intensified. There have been few thoroughly interesting collections of love letters; those that occur to our memory as exceptions, Swift's and Mérimée's, were not written in youth, and were without passion in the ordinary sense of the word.

Here and there a passage shows Carlyle's power of caustic portraiture, as when, after seeing Coleridge in London, he writes of him as "sunk inextricably in the depths of putrescent indolence"; but these descriptions have been mostly omitted by the editor—unnecessarily, we think. Endless talk of "thee and me" is the burden of the letters, as, indeed, was proper and natural.

But if the entertainment afforded by these letters is not extraordinary, they have great value of another sort. We will not presume to say that we fully understand the characters of these strange lovers, but at least certain points in their courtship now stand out clearly. Carlyle, it is evident, was smitten by love at first sight in good orthodox fashion. Miss Welsh was dazzled by his intellect, but for some time scarcely conceived the possibility of marrying him. At the very beginning she gives him to understand that there is a social gulf between them, and Carlyle sends a manly acknowledgment and defence:

Once more, then, I entreat for one word of kindness. Forget the roughness of my exterior, if you think me sound within. Let me write to you with frankness and from the heart, if you would not have me altogether despicable. The Graces cannot live under a sky so gloomy and tempestuous as mine. I lament their absence, since you lament it; but there is no remedy. If nature had meant me for a courtly person, she would have made me richer and more impudent. In this latter point, you think she has been liberal enough. How widely, how cruelly do you mistake me!

Carlyle was to her a schoolmaster, an aid to her absorbing determination to excel in literature. Whether from conviction or for flattery—he showed himself throughout a canny wooer—he expressed unbounded belief in her future. Indeed, for a while their letters are more concerned with her ambitions than his, and he soon feels obliged to send her counsels of moderation. He holds up as examples those who have come to honors late in life. "Will you also let me say," he adds, "that I continue to la-

ment this inordinate love of Fame which so agitates you; and which, as I believe, lies at the root of all this mischief. I think this feeling unworthy of you: it is far too shallow a principle for a mind like yours." At another time, and the words sound strangely from his pen, he is warning her against overstudy and contemplative melancholy and "that sickness of noble hearts, that deep and sad feeling of the nothingness of the world, which is apt to arise from too exclusive a pursuit of things high and spiritual, and too great an isolation from the every-day interests and enjoyments of life." And then, as the months pass and neither her proposed translation from the German nor her meditated novel gets on, she becomes less the author and more the woman. "Oh! but *I have no genius!*" she cries in July of 1823, seeking the encouragement which Carlyle returns with no niggardly hand. The cry is repeated, but with less emphasis and less insistence until it is lost in the more absorbing struggle against succumbing to the man who all the while is able both to love and to work.

This more personal relation between the two is complicated by the fact that Carlyle's letters passed under the eyes of the lady's mother. Perhaps one should say rather "were supposed so to pass," for one suspects that the lady used this pretext to keep the gentleman within bounds of a brotherly and tutorial affection. At any rate, those bounds were broad enough, including certain demonstrations that may be claimed by a brother but scarcely by a tutor, and permitting a language of high-wrought passion which could speak almost anything but the word marriage. The crisis comes in a letter from Carlyle, dated Pentonville, January 9, 1825, with its direct appeal: "Will you go with me, will you be my own forever?" The lady's reply is frank, if disquieting:

Think of something else, then; apply your industry to carry it into effect, your talents to gild over the inequality of our births; and then—we will talk of marrying. If all this were realized, I think I should have good sense enough to abate something of my romantic ideal, and to content myself with stopping short on this side idolatry,—at all events, I will marry no one else. This is all the promise I can or will make.

To this Carlyle sends a long answer, passing from reproach to submission. "You are such a generous spirit," he says; "but your purposes and feelings are not such." It would not be easy to find elsewhere a letter from a woman like that which follows from Miss Welsh:

My heart is capable (I feel it is) of a love to which no deprivation would be a sacrifice—a love which would overleap that reverence for opinion with which education and weakness have begirt my sex, would bear down all the restraints which *duty* and *expediency* might throw in the way, and carry every thought and feeling of my be-

ing impetuously along with it. But the all-perfect mortal which could inspire me with a love so extravagant, is nowhere to be found, exists nowhere but in the romance of my own imagination! Perhaps it is better for me as it is. A passion like the torrent in the violence of its course, might perhaps too, like the torrent, leave ruin and desolation behind. In the mean time, I should be very mad, were I to act as if from the influence of such a passion, while my affections are in a state of perfect tranquillity. I have already explained to you the nature of my love for *you*; that it is deep and calm, more like the quiet river, which refreshes and beautifies where it flows, than the torrent which bears down and destroys. Yet it is materially different from what one feels for a statue or a picture.

But she adds: "Not many months ago, I would have said it was impossible that I should ever be your Wife; at present, I consider this the most probable destiny for me." It was a virtual defeat, and, indeed, she herself regarded her words as practically an engagement. The third and fourth acts of the drama simply show the increasing domination of Carlyle's personality over hers. In the end the misgivings were more on his part than on hers. Having surrendered, she, with a woman's singleness of mind, saw but one thing, her love; whereas the dualism of masculine nature shows itself in his occasional sad self-questionings.

It is a strange drama of the heart that is set in these letters, and they have the further value of putting to rest a number of doubts that should never have been raised. To say, after reading these confessions, that Miss Welsh never really loved Carlyle, would be stark nonsense. They, moreover, forever put away Irving as an important factor in the event. Mr. Craig, we think, would not have written his recently published volume on "The Making of Carlyle" (see the *Nation*, April 8, p. 360), if he had perused this record. That Miss Welsh was once enamoured of Irving she herself admits in a letter of humble contrition; that she had any regard for him after Carlyle came well upon the scene her expressions of amused contempt for him and her attitude toward his wife make inconceivable.

More important is the light thrown by these letters on Froude. Undoubtedly that writer erred not only in matters of fact but in comprehension. First of all, the nasty scandal that he left to be scattered to the world after his death is again completely discredited. The letters of Carlyle here printed agree with those written after his marriage in rendering such an hypothesis perfectly foolish; and in his notes the present editor brings direct evidence against it, if such evidence be needed. To a certain extent also Froude's exaltation of Mrs. Carlyle at the expense of her husband be-



comes less plausible, for, if any such balance must be struck, the man comes through the ordeal of the drama now disclosed with higher honors than the woman. Yet, withal, in its larger aspects Froude's characterization is rather confirmed than discredited. If his judgment was highly peccable, he at least had that literary genius which alone could set Carlyle before us as himself a living genius. He understood also the egotism, the magnificent egotism, of Carlyle, which is so essential a part of his power. We may henceforth, out of regard for these letters and the other letters published since Froude's work, believe that the married life of the Carlyles was not so tragic as it was there presented. Twenty years after marriage the wife could write in a letter now in the possession of the editor: "I have grown to love you, the longer the more, till now you are grown to be the whole Universe, God, everything to me"; but it is still true, and these letters do not detract from such an impression, that Carlyle must have been, to use Froude's version of the phrase, "gey ill to live with." Not with impunity shall a woman surrender herself to the keeping of one with the intense, brooding, troubled egotism that made the *fond* of Carlyle's character. Nor was he himself blind to this danger. In a moment of expansiveness, after Miss Welsh had written her confession of an early love for Irving which she had concealed from Carlyle, he breaks out into a passionate cry of alarm:

You feel grateful to me that I have "forgiven" you? You thank me, and say I treat you generously? Alas, alas! I deserve no gratitude. What have I done? Assured you that my affection is still yours, that you are even dearer to me for this painful circumstance. But do you know the worth of that affection? Have you ever seen *me* and my condition in the naked eye of your reason? You have not: you do not know me. . . . What is my love of you or of any one? A wild peal through the desolate chambers of my soul, forcing perhaps a bitter tear into my eyes, and then giving place to silence and death? You know me not; no living mortal knows me—seems to know me. My heart has been steeped in solitary bitterness, till the life of it is gone: the heaven of two confiding souls that live but for each other encircled with glad affection, enlightened by the sun of worldly blessings and suitable activity, is a thing that I contemplate from a far distance, without the hope, sometimes even without the wish, of reaching it. Am I not poor and sick and helpless and estranged from all men? I lie upon the thorny couch of pain, my pillow is the iron pillow of despair: I can rest on them in silence, but that is all that I can do. Think of it, Jane! I can never make you happy. Leave me, then! Why should I destroy you? It is but one bold step and it is done. We shall suffer, suffer to the heart; but we shall have obeyed the voice of reason, and time will teach us to endure it.

These were not the words of an idle romanticism; they sprang from the depths of the man's being, and in them lies the justification of Froude's magnificent biography, however we shall be obliged to correct his work in details. After all deductions are made, the real Carlyle is the Carlyle of Froude.

#### CURRENT FICTION.

*A Prince of Dreamers.* By Flora Annie Steel. New York: Doubleday, Page & Co.

Before this book appeared, one would have said that Mrs. Steel was probably as well qualified to write an historical romance of India as any one living. Her wide acquaintance with modern India she has revealed in several novels of decided depth and power. Her recently published history of the country declares her interest in the long evolution of Indian civilization. Yet in spite of her combination of talents, she has fallen to the bottom of the pit which gapes for all historical romancers, and which is most dangerous, unfortunately, to those whose purposes are most serious. The interests of the novelist spoil the "Prince of Dreamers" as history, and the interests of the historian spoil it as fiction. It was perhaps true to fact to make the court of the great sixteenth century Mogul, Jelâl-ud-din Mahomed Akbar, as dull as a stagnant pond, even when the heir-apparent was conspiring against the throne. If the book really admitted us to the mysteries of Akbar's dream, we could dispense with external action; but though his interpreter tells us in so many words that he was dreaming of empire, the man himself remains a kind of graven image, inarticulate and impenetrable to the end. In the last two or three chapters the infinitely tedious plotting and tattle about the possession of the King's Luck, a big diamond which Akbar wore in his turban, comes to a sharp head, and we enjoy a few minutes of unexpected excitement. If there is any profound significance in the story, we reluctantly assent to the motto from Hafiz on the fly-leaf: "Not every one who readeth the page understandeth the meaning." Nor—to pass on to less obscure matters—is it always easy to understand the style. The problem of making the characters speak without destroying the illusion was, of course, difficult. But a modicum of stylistic tact would have felt the vicious dissonance of "messieurs," "Let her pass an' she will," "A Râjput lives by his sword—would I had it in some wames I wot of." So far as the merely descriptive passages go—and they go very far indeed—we will not question the accuracy of Mrs. Steel's antiquarianism. It is exactly the antiquarian's love of discoursing in detail on ancient manners, costumes, etiquette, games, mor-

als, religions, and literatures—it is this antiquarianism, tempered by a love of gorgeous word pictures, that ruins the book. The ill-fated story, symbolic or not, is absolutely smothered to death by description.

*The Straw.* By Rina Ramsay. New York: The Macmillan Co.

A slight but fairly diverting book made up of a half-dozen foxhunts and a murder—the treatment is just serious enough to hit off the life of the rather seedy English gentry who follow the hounds, after the custom of their forefathers. The characterization of the dowdy, coarse-fibred women and empty-headed men is sketchy but light-handed and clever. The two rascally "Babes" who, subsidized by their aunt, pretend to be engaged in scientific farming, but in reality hang on the skirts of the hunt, are jolly novelties in humor—attached, to be sure, somewhat artificially to the main action. The Straw, the only "nice" woman in the community, is the pivot of the serious action. She excites the hatred of the faster element among her associates and the chivalry and sympathy of the better sort. She herself is an extremely passive and insignificant creature, standing mute and helpless amid the contending passions which she evokes. Yet though her attempt to save a morally drowning man leads indirectly to his ruin, the influence of the poor girl is in the long run salutary, and her sense of right and wrong becomes the touchstone to test the other characters. None of these people, however, is deep or subtle enough to excite any lasting interest. The zest of the book lies in the crisp, racy style, and in the fact that one is kept most of the time in the saddle, galloping furiously after the hounds.

*Christopher Hibbault, Roadmaker.* By Marguerite Bryan. New York: Duffield & Co.

This is a thoughtful story of serious purpose and of high-minded endurance, endeavor, and accomplishment. The scene is in England. Of the characters there is, first, the hero, who, having when a little boy tramped the road with his mother and having never forgotten how rough was the way for them both, dreams dreams of becoming a maker of "highroads—not in towns but across countries—roads that will be easy to travel on and will last." Then there is the memory of the mother, weary and worn, a Socialist who had fled from her husband, preferring poverty and the road to money made by oppressing the poor. Later comes into the story the father himself, still piling up his hard-hearted millions and desiring at last to find his son. Meantime a relative of his, an old lover of the mother, has plucked the boy from the poorhouse and