

THIS PAGE LEFT BLANK INTENTIONALLY

P 00783

is like living on brandy and soda-water. This prodigious dose of divinity has made me feel half-chloroformed." The following, however satisfactory to the emancipated, could hardly please the conservative of any school:

"I have been reading Gibbon's 'Decline and Fall' with great pleasure and admiration. Nine-tenths of what people of all 'denominations' shriek at him for is simply true. His sneers are almost always at priests, not religion. His sketch of the progress of Christianity in the first three centuries is the only piece of ecclesiastical history I have ever found interesting, or indeed intelligible."

Patmore's opinions were his own, whether any one else shared them or no. W. M. Rossetti says that Patmore, setting Burns above Tennyson, "instanced, as a line of unsurpassable beauty, 'With joy unfeigned brothers and sisters meet,' which recalls F. W. Robertson's jest on genial critics: 'As the poet beautifully remarks, 'She did so.'" This, to be sure, was in 1849; but throughout life Patmore's dicta went on in the same free, large, random, hit-or-miss style. Bacon's philosophy was "as base as his life"; Longfellow wrote some good lines and "heaps of sush"; Crashaw, of whom Patmore knew little till 1881, produced in "Music's Duet" "perhaps the most wonderful piece of word-craft ever done"; Robert Bridges—or perhaps any other poet—could hardly be recognized "when alternately stretched and cramped on the Procustes' bed of the sonnet"; Henry James "is incomparably the greatest living writer of fiction." With some of these judgments one may agree; but then his son, who died at twenty-two, "had he lived, would probably have reached the very highest place among contemporary English poets," and he himself was "the only poet of the generation, except Barnes, who has steadily maintained a literary conscience." On meeting Miss Byles, who became his second wife, he wrote, "I had never before beheld so beautiful a personality," though her predecessor, to whom he was devoted, and whom he most sincerely mourned, had been noted for beauty of person, mind, and character. As his biographer is forced to admit, his superlatives express "enthusiasm rather than comparison." That habit never left him.

His coreligionists, he thought, cared less for his poetry than did others. Yet Manning, as early as 1855, had recognized not only its purity and chivalry, but "a predominance of imagination over fancy," and "of the intelligence over the imagination." His self-estimate had liberal backing from friends. Thus "H., who is one of the most sober, cultivated, and severe of critics, says that 'The Unknown Eros' surpasses, in weight of matter and loftiness and perfection of style, all the poetry of the past generation, and is as secure as any book ever written of becoming a permanent British classic." Also, "Ruskin writes that 'no living human being' has ever done anything that has helped him so much as the Odes!" These Odes (1877-78), though the public neglected them, were, Patmore thought, his best verse-work, as they were his last. The last was always the best—till it was in type; then, "all the meaning and beauty I fancied I saw in them seems to have vanished," and he fears he may be "nothing but a miserable, self-deluded poetaster." That is a happy touch of nature; but where is the truth between the two extremes?

Mr. Champneys has headed his volumi-

nous material by sections, which are mainly topical rather than chronological, so that you may look for the same thing in half-a-dozen places; the result is something of a jungle. There is an index of twenty pages, but it does not always aid the inquirer: who can "spot" every allusion in innumerable letters, fragments, and aphorisms? There are chapters on "Principles and Ideals," "The Church," etc., which may make fine reading for a Patmore Society. The book as it stands appeals chiefly to Patmorites, if there be such; but, with some slight concrete additions from without, it affords stuff to be boiled down into a briefer and continuous account of the man and his work in some future series of literary biographies.

WILLIAM HERSCHEL.

William Herschel and His Work. By James Sime. Charles Scribner's Sons. 8vo. pp. 265.

Before Herschel the Great, astronomy had consisted almost exclusively in measuring the positions of the stars, at different times, relative to one another and to the earth, and in searching out and testing hypotheses to explain their motions. The most important exception to this statement is that, as early as Ptolemy, at least, some astronomer—~~who may, for several reasons, guess it was a Babylonian~~—divided the visible fixed stars into six magnitudes, which were then further subdivided by affixing "greater" and "less" to their ordinal numbers. This is one of the most important facts in the history of science, for the reason that when the light of the stars came to be measured, several millennia later, it was found that there was a mathematical relation between the ordinal numbers of the magnitudes and the intensity of the light sufficiently accurate to form the basis of a mathematical mode of reasoning—a discovery which came almost too late to be of service in astronomy, but which may serve to assure us that direct estimates of differences of sensation of any kind will, under proper precautions, have sufficient objectivity to form the foundation for an exact science. The only other exceptions worth mentioning were Galileo's telescopic discoveries, and a small body of observations relating to the surfaces of the sun and moon. The old astronomy probably never can cease to be the crown of science, as having been the most efficient factor in the development of man's scientific intelligence; but its living importance is already beginning to cede to that of the new astronomy, which applies photometry, photography, spectroscopy, bolometry, polariscopy, and physics generally, to the study of the stellar universe.

The new generation justly regard Sir William Herschel as the father of the New Astronomy. It was he who first compared the spectra of the different stars; it was he who first made careful and definite observations upon the relative lustre of a great number of stars; it was he who first made a great telescope and showed, in the most masterly manner, all the uses to which it could be put; it was he who first proved the motion of the solar system as a whole; it was he who first showed that observation could discover the structure of the galactic cluster; it was he who first produced evidence of the variation of our climate with that of the frequency of sun-spots; it was the survey begun by him and completed by

his son which discovered, and furnished us with tolerably accurate descriptions of by far the greater part of all the nebulae known to-day; it was he who showed how to apply those observations to speculation upon the evolution of the universe; it was he who first undertook to survey the entire heavens systematically and with practicable thoroughness; it was he who first taught man to contemplate the heavens with an eye of discernment.

The greatness of the man and his enormous originality are proved by the fact that it is only within the last third of the last century that astronomers generally have recognized the importance of his work; and we have to thank many of his contemporaries in the astronomical world for demonstrating how far he shot above them by kindly recording, for the benefit of posterity, their own assiduous opinions of his results. The man who to-day has spent a lifetime in elaborating an exacter or wiser method in some branch of science still in the hands of fogies (as such branches there still are) will find a warming cordial in those contemporary criticisms of William Herschel.

One may be sure that a man of such achievement was a wonderfully real personality, with more life in him than other men, who seem mere shadows by his side. It may be doubted whether, among all his contemporaries, there was any except Napoleon Bonaparte to be compared with him in force of personality. He would have made the most splendid subject for a biographer of the first order, were it not that the greater part of his waking hours during his active years were spent with his eye glued to the telescope, or with his hands to the grinding-tool, so that his sister had to put the food into his mouth. What was his origin? Mr. Sime, who is one of that great tribe of biographers who are a little timid about the truth, tells us that his family was a "sturdy Protestant stock"; but it is easy to recognize in the name, from the Old High German *hēr*, "superior," one of those magnificent appellatives which are affected by our Semitic cousins; and when we find that grandfather Abraham Herschel begot Isaac, who begot Jacob, Sir William's eldest brother, we hardly need to be told more. The family, however, became Protestant, and emigrated from Moravia to Saxony, in consequence of this change of religion. Sir William's father, Isaac, was nothing but a poor and prolific Capellmeister of the regiment of Royal Hanoverian Guards; and his wife was the simplest of Hanoverian peasants, unable to write a letter to her husband, and energetically opposed to all learning, down to the very multiplication-table, as a most dangerous and unpractical thing, subversive of orderly life. The father, however, was a man of ability and breadth, who would often sit up to the small hours in conversation with Friedrich Wilhelm, the little sister in bed in the room, catching from time to time the names of Leibniz and Euler. This father was also a born musician, as were all (except possibly one) of his children, and most of their posterity since. William was a very clever composer, and lacked nothing of having an artistic nature, except those defects of character and of temper which are understood to belong to the genius. Literary capacity distinctly appears in all his writings. He learned languages with great facility, being

perfect in his French and English, without any regular schooling, and good in Italian and Latin. That he should have expressed a dislike for poetry on account of its untruthfulness, only goes to place him in the category of scientific minds of poetical tendencies, all of whom, from Plato down, have been more keenly sensible than other men of the dangers of poetry. Poets always liked him; and the very notes of observations which he would call out in dictation to his sister within, as he would stand at his telescope outside, with the thermometer perhaps toward zero, and his person carefully brought as near as possible to the temperature of the atmosphere, have, as Professor Holden has shown, their poetical breaks.

Capellmeister Isaac of course found Wilhelm a place in his band, and at the age of seventeen, about the beginning of 1756, they first went to England with the regiment. At the gloomy opening of the campaign of 1757, they were ordered into the field. The father's health had been pretty well broken in the former war with France (he had been at Fontenoy), and now that same Duke of Cumberland, again their commander, was defeated anew at Hastenbeck. The mother, at this, insisted upon her "practical" view of the proper thing to be done, which was, that William should desert. This he accordingly did, and went to England so hurriedly that he was not even able to carry anything with him; and when his mother dispatched his things after him, she did not see fit to include his precious Locke's "Essay concerning Human Understanding." So there was the boy on a foreign shore, without acquaintances, almost without a penny, but with such a "go" in him that within ten years he occupied the lucrative post of organist of the Octagon Chapel in the fashionable city of Bath, conducted all the concerts at the rooms and the theatre, besides having a separate orchestra of his own of a hundred pieces, was overwhelmed with pupils, and, after seventeen hours of work daily, would go to bed to unbend his mind with Smith's "Harmonics" or MacLaurin's "Fluxions."

Smith's "Harmonics" led him to Smith's "Optics," and, finding his time hang heavy on his hands after the day's work would be done, he took to making himself telescopes in order that he might see what no mortal had seen before. Meantime, he was doing everything for the family in Hanover, and had found time, himself, to make the grand tour. At any rate, he had been as far as Italy. His elder brother, Jacob, was an eminent musician; but the other four were looked after by William. Sophia's five sons were provided with places as musicians at the English court. Another brother, Alexander, though an energetic man and good musician, lived much in William's house, and was pensioned by him. The remaining brother, Dietrich, also a musician, seems to have been almost supported by William, and received £2,000 by his will. The other sister, Carolina became William's astronomical assistant and a distinguished astronomer herself. He himself received from the astronomer-king, George III., for whom a major planet had been named, the first to be discovered in historic times, the munificent pension of £200, along with his pardon; and he bequeathed to his son, Sir John, two estates and about thirty thousand pounds. His lady was residuary lega-

tee. This was pretty well done, for a man who had hardly given himself time to look nearer earth than the orbit of the Georgium Sidus. One of the most powerful intellects that the history of human science can show, with a musical and artistic temperament sufficient to give him a place in the history of that art, an administrator of such ability as to raise him from something like twenty shillings, with which he landed in England, to positive wealth by his own unaided efforts, he was certainly as well-rounded and well-vitalized a reality as any man need be, even in the age of the French Revolution.

Mr. Sime's biography is rather confused. It does not compare for an instant with another life of the same hero, published by the same house twenty years ago, which was a perfect gem of literary judgment and skill, and remarkable for the justice and knowledge of its scientific appreciations, being in fact the work of a leading astronomer, the Chevalier Holden—to call him by a title which, it is needless to say, he does not use. Mr. Sime has omitted some things which the earlier writer did not fail to make clear, has inserted a few items which his predecessor seems to have rejected as distracting details, has corrected one error, that Herschel's degree of LL.D. came from Oxford, though really from Edinburgh, and has made a nice padding of irrelevant matter, which is not bad reading when it does not too much embroil the essential facts. In this way, he has contrived to double the "reading-matter," very much at the expense of the literary quality of his book. We miss the charming portraits of the earlier volume.

Great Boer War. By A. Conan Doyle. With six maps in colors. McClure, Phillips & Co.

It is certainly too near the events to get the proper perspective for an accurate and unbiassed history of the Boer war, especially while hostilities are still going on, even though they are in the guerilla stage, the last embers of a once furious flame soon to be stamped out, and when the documents which would clear up many doubtful points are yet unpublished. But it is satisfactory for those to whom the operations in South Africa have come in a fragmentary way, to have a good bird's-eye view of the year's warfare, with the details unified into a coherent and intelligible *ensemble*; and this is furnished by Conan Doyle. He served as a surgeon in one of the great hospitals, and, while modestly deprecating any pretension of giving an elaborate study of the war fortified by documents, does present a thoroughly readable account of the transactions in their bearings upon one another, with vivid and not highly colored pictures of battles, and with a discussion of the causes and probable outcome of the war, which, if from the standpoint of a sturdy advocate of the essential justice of the British side, is nevertheless moderate and generous in temper, judicial in praise and blame, and without a trace of rancor or mere partisanship.

The history, until it reaches the last tangles of the guerilla warfare in the Orange River Colony (or Orange Free State, as we used to know it), which is still the seat of these disturbances, and where the operations are of that minor type difficult to make in-

teresting, is full of life and of enlightenment upon hitherto dark places. It relieves the British soldier from those suspicions of lack of sticking quality which have led some recent critics to declare that the English army had lost its ancient fighting fire. Dr. Doyle shows this criticism to be unjust as to the men, and, so far as bravery is concerned, as to the officers, although he makes many unfavorable comments upon the inability of the sort of officers, high and low, which the existing appointment system puts over better men, to recognize new conditions. As to the causes of the war, the author insists with much force that the match which enkindled the explosion, without which there would have been no other hostilities than those waged by tongue and pen, was not Rhodes's intrigues or Cabinet aspirations for empire; but the rejection by the Kruger Government of the entirely reasonable demands of the "Uitlanders," the settlers in the mining districts, for a larger participation in the administration of public affairs. Had the Boer rulers been possessed of an atom's appreciation of the inevitable requirements of a modern republic, they could, by a judicious extension of the franchise, have fortified their government in the hearts of these newcomers, of whom only a small majority had any desire to put the state into the British colonial system. There were Boers sufficiently sagacious to see this truth, but the majority, led by Kruger, readers of the letter of the Old Testament, and, like the Puritans of the sixteenth century, infatuated with the conviction that they were the modern children of Israel, foreordained to possess the earth and to overcome all unbelievers, not only brutally denied these petitions for rights, but intrigued and made elaborate preparations for the extension of their empire over the neighboring British colonies.

With regard to the military operations when hostilities were under way, it appears that the melancholy series of disasters which, in the autumn of 1899, carried dismay to English homes and legislative halls, were largely due to the tactics of generals blind to the revolution which long-range cannon and magazine-rifles in the hands of sharpshooters had wrought in modes of assault and defence. For the first month or two the attempts of the British generals to carry fortified Boer positions were made with solid columns moving against the enemy's front, where riflemen, lying behind rocks and ditches, made a special mark of the uniformed officers, the fatalities among colonels being distressingly great. At Colenso, in Natal, on the 15th of December, 1899, Gen. Buller sent brigades to the assault of fortified positions in quarter column, with no scouts to learn the ground and no skirmishers to precede the battle. So at Magersfontein, on the march to Kimberley, on the 10th of December, a similar dense column, moving through an unknown country in the dark night, stumbled into an entrenchment of the Boers protected by wire abatis, and was hurled back in utter disorganization, as might be expected of the most valiant troops under such conditions. Two months of such blunders were a sufficient lesson, and, by the time Roberts came into the field with large reinforcements, the method of attack of which Gen. Sherman was so distinguished a master in the Georgia campaign of 1864, of extending the advancing lines around the