



I.

IMPRISONMENT for debt is popularly supposed to have been abolished; but although the Fleet, the Marshalsea, and Whitecross Street Prison have disappeared, a number of persons (4,438 in 1874) are deprived of their liberty every year because they cannot pay what they owe. Just as the French, after pulling down the old Bastille, found during the Reign of Terror that they wanted Bastilles more than ever, so we have abolished our debtors' prisons only to crowd our ordinary gaols with county court defaulters. It is true that technically these unfortunates are not imprisoned for debt, but for Contempt of Court, just as the Church used to deliver heretics to the secular arm, but this aggravates their hardship, as nowadays imprisonment does not, a of yore, relieve them from their liabilities; on the contrary, they may be locked up over and over again. The worst of the matter is that these harsh measures are only dealt out to the poor, those who can persuade people to give them credit for fifty pounds and upwards need not fear the loss of their personal liberty. All these evils are forcibly set forth by Mr. Robert Lowe in the *Fortnightly Review*, and we entreat him to raise his voice again and again in Parliament until our legislators are persuaded to abandon this iniquitous state of affairs which only encourages a mischievous credit-system.—The Spaniards are noted for their pithy sayings, and Mr. Grant Duff has made a collection of the apophthegms of one Balthasar Gracian, a Jesuit who flourished nearly three hundred years ago. The collection fully deserves the praises Mr. Duff bestows upon it.—In the "Age of Reason" Mr. Pattison institutes a comparison between the eighteenth and nineteenth centuries, not altogether to the advantage of the latter. Some nations have gone backwards, and wars, if not more frequent, have been more destructive.—Sir John Lubbock, who has been closely studying the habits of ants, upsets some of our ordinary beliefs concerning these active little creatures; Mr. Slagg shows how much even a modicum of Free Trade has achieved for French industry; while Mr. John Morley's address to some Staffordshire miners is a powerful piece of eloquence of the modern radical type. His remarks on the want of public-spirited liberality among English millionaires are especially worthy of note.

The paper in the *Contemporary* which chiefly attracts us is that on "The Social Methods of Roman Catholicism in England." It is written by a zealous Romanist, and we venture to say that it is more calculated to strengthen his creed than a shelf-full of polemical tracts. His (or her) argument, for we do not feel sure of the writer's sex, may be stated thus. The Roman Catholics are in England and Wales but a feeble folk, the bulk of them come from Ireland, and are steeped in poverty, yet among these people a handful of clergy and laity have worked with such self-denying energy and vigour that a population which might have threatened revolution is mainly orderly and self-respecting. This result, the author argues, could not have been brought about except by the possession of a dogmatic faith, and by the admirable mechanism of the Roman Church, and he asserts that Protestants are successful in reaching the hearts of the degraded poor, only in proportion as they imitate the Roman Catholic method. One thing is certain, namely, that the isolation and unneighbourliness of great city life is a phenomenon which was almost unknown in former times, and it is an accompaniment of the industrial activity which has been developed since the Reformation. It is least observable in countries such as Spain, which have remained most genuinely Catholic.—We like Professor Blackie's account of the rise and progress of Prussia, because it is so pointedly witty, and because he packs so much into a little space. Some lumbering essays, whose writings seem suffused with the idea of payment at so much a line, would do well to take the Professor for a model.

In the prefatory sonnet which ushers in *The Nineteenth Century* Mr. Tennyson has accomplished a *tour de force*, for he has clothed in glowing and highly poetical language some very prosaic facts—namely, that certain gentlemen have seceded from the *Contemporary* for the purpose of starting a new magazine, and that some of these gentlemen are believers in revelation, and others quite the other way. Five out of the ten papers in this, the opening number, are devoted to religious topics, a significant proof of the extreme interest felt in such matters nowadays. A new edition has lately been published of a book which had become scarce, the late Sir G. C. Lewis's "Influence of Authority in Matters of Opinion," and here Mr. Gladstone applies Sir George's canons in support of the main doctrines of Christianity. He begins by showing how much in all matters we are dependent on authority, that is, on inquiries made by other persons, and not by ourselves, and he proceeds to show that the general consent given for so many centuries to Christianity is a powerful argument in its favour. We imagine that the modern opponents of Christianity might reply to Mr. Gladstone that most of the witnesses to the truth of the system in past times have now lost their credit because of their ignorance of certain scientific truths which have only been recently revealed; for example, it is far harder to accept a miracle now than it was at any time during the first 1,600 years after the birth of Christ, and therefore the general consent of the men of those sixteen centuries weighs little with the modern sceptic. Mr. Gladstone does not touch on this point, nevertheless his article is in many respects admirable, and we like it the more, perhaps, because of its kindly, liberal, and genuinely Christian spirit than because of its intellectual acuteness. Altogether *The Nineteenth Century* starts with high promise of success. Mr. Ralston's Turkish Story Books, Sir John Lubbock's defence of our Imperial Policy, and Mr. Baldwin on "Preaching" are all good in their various ways, Cardinal Manning's "True Story of the Vatican Council" will naturally be followed with much interest, while, after so many big subjects, it is quite a relief to come across Mr. Matthew Arnold's polished and scholarly essay on that noble and gallant little gentleman, the second Lord Falkland, to whom a monument is about to be erected at Newbury.

There is a great deal of the pleasant intelligent gossip in which *Blackwood* always excels in the papers severally styled "Devious Rambles with a Definite Object," and "Jottings in the Tyrol," while "Balzac" should be studied by all who have ever read any of the many works of that wonderful writer. The essayist fully admits his shortcomings, allows that he is at times very dull from his excessive minuteness of detail, but nevertheless the triumph remains that he ends by making the reader believe in his creations as devoutly as he believed in them himself.

In the *Cornhill* we have only glanced at three papers, namely, "The Gossip of History," in which a number of more or less well-known anecdotes are very agreeably strung together; a

paper on Turkish Festivals; and a very picturesque description of the Alps as they appear in the winter, when the mountain streams become mere threads, and the lakes are unpolluted by the inrush of turbid torrents.

Temple Bar is worth buying if only for a capital article on Jockeys. Successful jockeys, though necessarily small in stature, are very great men in other respects. The chief jockey of 1876 made an income of 8,746*l.*, a sum far in excess of that paid to Lord Beaconsfield for managing the affairs of the British Empire. Or take as a still greater contrast the fact (stated in another paper in this same magazine) that Sir Christopher Wren's salary for designing the churches and superintending the rebuilding of the City (after the Fire) was 700*l.* a year, which was to cover all his expenses of models and drawings, making out estimates, entering into contracts, &c.

There are several very important articles in *Fraser*, especially that on "Discipline and Seamanship in the Navy," but we prefer to call attention here to some of the minor papers, as, for example, that by a Chinese gentleman on the foreign relations of China. In reply to the stock accusation of unsociability, our Chinaman boldly declares that the Chinese were once sociable, but that they were bullied and ill-used by Portuguese and other foreigners.—Those who would like to know something about a most peculiar and little visited region of England—should read an excellent paper on the Norfolk Broads; while, lastly, if there is anybody left who is not weary of spirit-rapping and table-turning let him study Dr. Carpenter's lucid and amusing exposure of these mysteries.

Mr. Goldwin Smith, in *Macmillan*, takes a much more cheerful view of American politics than was afforded by "An American Republican" in the January number of the same magazine. He thinks the corruption, which is so much talked about, far less serious than the corruption of England in the last century, or of France under the Second Empire, but he considers that the plan of electing a King every four years is a mistake. America, he says, will after a while, be content, like Switzerland, with an Executive Council presided over by a chairman.—According to M. De Lagardie, French novels give a very unreal view of French life, and are little read by the classes—young ladies especially—who read novels in England. There is a demand for respectable novels, as evinced by the immense sale of such works as Mrs. Craven's *Récit d'une Sœur*.

MR. DARWIN'S LAST BOOK

IN every book by Mr. Darwin we are sure to get the results of much thought and of careful and long continued investigation. His last work, "The Effects of Cross- and Self-Fertilisation in the Vegetable Kingdom," is to some extent a sequel to that "On the Contrivances whereby Orchids are fertilised by Insects." The idea is this: Nature seems to have arranged, by means of insects and in other ways, for the cross-fertilisation of plants; let us see whether there is any reason for this, by contrasting the growth and vigour of plants of exactly the same antecedents when cross-fertilised and when suffered to fertilise themselves. Mr. Darwin found that, in almost every case, the cross-fertilised plants were far stronger and finer, and had more and better fruit, *i.e.*, crossing answered in plants as well as it does in animals; and therefore there was seen to be a reason for the often elaborate arrangements whereby Nature has made it very difficult for many, wholly impossible for some, plants to fertilise themselves. Our only difficulty is at the end of the volume, when, having triumphantly established the above position, our author takes occasion therefrom to deny that the sterility of species when first crossed, and of their hybrid offspring, indicates that they differ in some fundamental manner from varieties or from individuals of the same species. That is, in plain language, because there are wonderful differences in the degrees of fertility of plants of the same species, some being completely sterile with their own pollen, we have no right to assume that different species are usually sterile when crossed simply because they are different species; the reason for their sterility is presumably the same as that which accounts for barrenness or fertility among plants of the same species, *viz.*, "the nature or affinities of their sexual elements," and these are due to long-continued difference of conditions. Thus with animals, two wild species intercrossed are almost sterile, but after long-continued domestication the mutual sterility is eliminated. Mr. Darwin had shown this in his "Variation under Domestication;" and he thinks that it holds of plants as well, and that to establish it is to prove that species are nothing but varieties which have lived for a very long time under their own special conditions. We confess that we cannot follow our author in this; to us the facts recorded in the earlier part of the book seem a very slight basis on which to ground so startling an assertion as the non-distinctness of species. This is, indeed, in general the weakness of Mr. Darwin and his school; by careful experiment some minor fact is established; and then, on the strength of this fact something else (in this case the distinctness of species) is impugned, there being to outsiders but little connection between the two.

However this may be, the final conclusion sought to be deduced in no way affects the beauty and thoroughness of Mr. Darwin's experiments. These were made on many kinds of plants, our author having been led to experiment by noticing how much finer a bed of seedling pinks raised from crossed seed was than one raised from seed self-fertilised. The contrivances which he used to exclude insects were as curious in their way as the boxes smeared inside with glycerine wherein Professor Tyndall catches the notes in order to give certitude to his experiments on spontaneous generation. Fine white cotton nets excluded all insects except "thrips," the self-fertilised and cross-fertilised seedlings were kept apart, under exactly the same conditions, and such methods as long experience suggested were used to eliminate error. The results were very striking. The *corvolvulus major*, for instance, succeeded so much better when crossed that the height of the crossed to the self-fertilised plants was as 100 to 76, the number of seed capsules being respectively as 100 to 69. This was in the first generation. In the next generation the height of the crossed compared with the uncrossed was as 100 to 79. In the third generation the proportion was 100 to 68. In the fourth generation the crossed plants were so much the finer that the respective heights were as 100 to 59. Out of ten generations one only, the 8th, gave a couple of self-fertilised plants superior in height to the crossed, and in this case there were special reasons for the change. The average for the ten generations was as 100 to 77 in favour of the crossed. It was much the same with the yellow *minulus*, where the average in ten generations was as 100 to 64 in favour of the crossed. The foxglove, so constantly fertilised by the humble bee, gave similar results, and so did many other native and greenhouse plants. In the case of the *Eschscholtzia* the crossed plants very little surpassed the self-fertilised in height, but were vastly superior to them in

the amount of seed produced. In mignonette the self-fertilised plants occasionally exceeded the others in height and vigour, as was the case in some generations of petunias, though the average was largely in favour of the crossed plants. On the whole, then, crossing from a distinct plant (for crossing from another flower on the same plant is of very little value) is an advantage; for, in the selection of species, crossed plants would outdo self-fertilised. In this way, rather than by differences of temperature, Mr. Darwin explains the zones of vegetation found in ascending a mountain. Where masses of plants are together there is plenty of scope for crossing, and therefore the masses grow bigger; but where an isolated individual has pushed away from the rest, the chances of crossing being few, that individual is not likely permanently to establish its offspring.

One of the most interesting parts of the book is that which treats of the habits of insects in regard to plants, and of the effects of colour in drawing insects to the nectary, where they cover themselves with the pollen which they carry off to another plant; many insects, for instance, seem to need masses of colour to draw them to a flower bed. Of the arrangements to hinder self-fertilisation the most remarkable, perhaps, is that of the *Pasqueura fragrans* (*Ord-rubicea*). The stamens are irritable, and as soon as a moth or fly insect visits the flower, the anthers explode and cover it with pollen; one of the filaments which is broader than the others then moves and closes the flower for about twelve hours, after which time it recovers its former position. Thus it is impossible for the flower to be fertilised except with pollen brought by an insect from some other flower. Contrivances of this kind surely show design and the adaptation of means to ends; so that, instead of railing at Mr. Darwin for denying design we should be thankful for the support which he has given to the doctrine of final causes. If, owing to the nature of the experiments, this book is not of such an absorbing interest as some of his works, it still deserves careful reading. "Cross-fertilisation is best for plants, therefore nature has taken means to make it the rule and self-fertilisation the exception" is the substance of the matter. Numberless experiments establish the premise; and our feeling that nature always does what is best prompts us to connect with it the conclusion. To put it otherwise: "Why does nature use so many contrivances to promote cross-fertilisation?" "Because" (as Mr. Darwin's experiments prove) "crossing is advantageous to almost every plant." Analogy suggests the natural question: how about the marriage of cousins? The evidence (says Mr. Darwin) is about equally balanced. What is harmful is not so much the marriage of near kin, for there never can be such near kinship in animals as in self-fertilised plants, as the marriage of persons brought up for generations under precisely the same conditions, mill-lads and mill-girls (for instance) the children and grandchildren of workers in mills. Here is one among the many practical hints which come out in a book marked like all Mr. Darwin's books by extreme fairness. The author is nervously anxious to note down any little fact that seems to tell against himself.



"DIANA, LADY LYLE," by W. Hepworth Dixon (3 vols.: Hurst and Blackett).—In Mr. Hepworth Dixon's many works of history and travel there has generally been a good deal to which exception might be taken in respect of both matter and style, but we doubt if the harshest of his critics could lay his hand on his heart and declare that he had found them dull. And dull we believe no reader will consider this history of the fortunes of Diana, Lady Lyle. Indeed, the weakness of the book, so far as it is weak, arises from Mr. Hepworth Dixon's besetting sin, the predominant desire to be always and at all costs "telling." But the story is one which, if judged by not too high a standard, must undoubtedly be allowed to possess many merits. There is abundance of variety in the scenes and characters presented to us, and abundance of the kind of interest which springs from the continual succession of strong, or quasi-strong situations. Some rough outline of the plot we must needs attempt. The heroine, the beloved and honoured wife of Sir Leonard Lyle, of Castle Lyle, is accepted without question by her husband and her English friends as the lawful daughter of Frank Randolph of Riverside, Virginia, Senator for his State, and a man whose blood entitled him to rank with the noblest families of Great Britain. But she knows that in Virginia, and by those true friends of hers in the North who have rescued her from the lot of bondage, the belief is held that she is the Senator's illegitimate daughter by a favourite slave, and that therefore she bears about her the double taint of bastardy and slavery. That such belief is absolutely groundless she knows full well, for she has as a girl seen the documents which prove her mother's marriage to her father, and the freedom of that mother's mother before giving her birth; but meanwhile these documents are not forthcoming. Randolph, whose life has been cut short by accident, has never acknowledged his marriage, and the *primæ facie* case against Diana is of the very strongest. In obedience, then, to a pledge of secrecy she has given to her dying mother, and to the friend who has in a measure taken that mother's place, she marries her young husband, keeping silence as to the supposed stain that rests on her birth and blood, and trusting that the time may come when she may be free at the fitting moment to tell him all. Of course, we are not surprised to find that before this fitting time comes the story in its ugliest shape is "sprung" upon Sir Leonard by venomous tongues; although why he, as an English gentleman, even if convinced that his wife had acknowledged the truth of the slanders concerning her birth, should have deemed that his honour bade him at once to part from the woman who had borne him the son who must carry on his line, and was still, as she had been for eight years, the very heart of his heart, is a great deal more than Mr. Hepworth Dixon makes us understand. But the truth is that though Diana and her husband and many of the other *dramatis personæ* make an effective show enough on Mr. Dixon's stage, they are but phantoms and make believes, and not flesh and blood, and an attempt to analyse them would be idle. Tab, the quadroon girl, "lying slut and negro scum," yet with the good at the bottom of her which she does not suspect herself till it comes to life under Sir Leonard's handling, has, indeed, some life-like elements about her, only the author has marred his conception by making her declaim in the fashion of a tragedy queen. But the language of his characters seems generally a difficulty with Mr. Dixon. Though his tale is one of the present day, the incidents described in the last volume being supposed to have taken place only half-a-dozen years ago, yet at a certain pitch of excitement we observe that everybody