

heat and light from the sun, have, like us, also the vicissitudes of day and night, since, by turning on their axis, they expose every part of their surfaces successively to the sun, and withdraw them at intervals from the light of that body.

But it may be objected, that the mere fact of turning on an axis may not produce the alternations of day and night on the planet; for that if the axis on which the planet turns be in such a position, that, instead of being upright, or nearly so with reference to the plane of the planet's motion, it be so placed as to point directly towards the sun, then the rotation would not expose successively the various parts of the surface of the planet to the solar light. It is found, however, that this is in no instance the case. It is observed on the other hand, that the axis on which each planet turns, is at such an inclination as to produce the alternations of day and night, in the same manner as these changes are produced upon the earth.

Every thing therefore connected with these appearances conspire to establish the fact, that on the planets there are the vicissitudes of day and night analogous to those which we enjoy. But as we have seen that the length of the intervals of day and night here have a correspondence with our physical constitution and organization, it becomes a question of some interest whether the intervals of day and night in the other planets are nearly the same or materially different from ours. If we find them not materially different, there is a fair presumption that those for whose well-being such an arrangement has been made are of a nature to require intervals of activity and repose nearly the same as ourselves; and therefore that probably they are of like physical constitutions.

Now, it is a fact, as remarkable as interesting, that while several of the planets have the same interval of day and night as we have, none of them are extremely different in this respect. When the appearance of the planet Mars is examined by a sufficiently powerful telescope, it is found that all the features which he exhibits at any moment gradually disappear in twelve hours twenty minutes and ten seconds, at the expiration of which time he exhibits an entirely new face. But by continuing to observe him, the former features come successively in view, and all his original lineaments are restored after the lapse of the same time. It is evident, therefore, that Mars turns round his axis with a diurnal motion once in twenty-four hours forty minutes and twenty seconds.

By similar observations it is found, that the diurnal rotation of Venus is performed in twenty-three hours and thirty minutes. The time of the diurnal revolution of Mercury is uncertain, owing to the difficulty of observing a body which is so constantly drenched in sun-light as to be scarcely ever visible at night. The diurnal rotation of Jupiter and Saturn is more rapid than that of the Earth, the former being completed in nine hours and fifty six minutes, the latter in ten hours and thirty minutes.

Thus it appears, that in those globes which are our nearest neighbours in the solar system, the alternations of day and night are in fact identical with our own, and that in Jupiter and Saturn they are at something less than half the interval. But we find no example among this family of worlds of such intervals of light and darkness as would be reckoned by days, months, or years. Now be it remembered, that there is no mechanical or physical law which renders rapid diurnal motion necessary, or which renders any such movement necessary. Can we then doubt that this voluntary convenience is provided on all for the same purpose as on our own globe: namely, to give intervals of labour and repose of such frequency and duration as are suitable to the nature and the necessities of their respective occupants; and as those intervals are in several the same, and in none materially different from those upon the earth, that these occupants are formed with a constitution and organization not very different from our own.

#### EDINBURGH REVIEW NO. CXXXV.

This Number abounds with vigorous writing, and its papers, apart from their political interest, must be considered as fine specimens of the modern Review composition. They have all that talking spirit—that *vis viva* of diction, and ready command of epithet which renders periodical reading so replete with life, energy, and polish, and the business of the great world. Unquestionably, the most striking, but, certainly not the most finished, paper in the present number—is on the Abuses of the Press, the peg whereon it is hung being the disgusting *Diary of the Life and Times of George the Fourth*. The accredited reviewer is Lord Brougham, and the whole is so caustic a commentary on the unhappy affair of George the fourth and his ill-starred Queen, that we are almost puzzled to select a passage that shall not, by its bias, offend the impartial reader. Still, in the following extracts, we hope to have succeeded in detailing the leaven of politics from a page or two of graphic power.

#### CHARACTER OF MR. CANNING.

Mr. Canning was, in all respects one of the most remarkable persons who have lived in our times. Born with talents of the highest order, these had been cultivated with an assiduity and success which placed him in the first rank among the most accomplished scholars of his day; and he was only inferior to others in the walks of science, from the accident of the studies which

Oxford cherished in his time being pointed almost exclusively to classical pursuits. But he was any thing rather than a mere scholar. In him were combined, with a rich profusion, the most lively original fancy—a happily retentive and ready memory—singular powers of lucid statement—and occasionally wit in all its varieties, now biting and sarcastic; to overwhelm an antagonist, now pungent or giving point to an argument, now playful for mere amusement, and bringing relief to a tedious statement, or lending a charm to dry chains of close reasoning. Superficial observers, dazzled by this brilliancy, and by its sometimes being over-indulged, committed their accustomed mistake; and supposed that he who could thus adorn his subject was an amusing speaker only, while he was helping on the argument at every step,—often making skilful statements perform the office of reasoning, and oftener still seeming to be witty when he was merely exposing the weakness of hostile positions, and thus taking them by the artillery of his wit. But in truth his powers of ordinary reasoning were of a very high order, and could not be excelled by the most practised master of dialectics. It was rather in the deep and full measure of impassioned declamation, in its legitimate combination with rapid argument—the highest reach of oratory—that he failed; and this he rarely attempted. Of his powers of augmentation, his capacity for the pursuits of abstract science, his genius for adorning the least attractive subjects, there remains an imperishable record in his celebrated speeches upon the "Currency," of all efforts the most brilliant and the most happy.

In private society he was singularly amiable and attractive, though, except for a very few years of his early youth, he rarely frequented the circles of society, confining his intercourse to an extremely small number of warmly attached friends.\* In all the relations of domestic life he was blameless, and was the delight of his family, as in them he placed his own. His temper, though naturally irritable and uneasy, had nothing paltry or spiteful in it; and as no one better knew how and when to resent an injury, so none could more readily or more gracefully forgive.

#### FLIGHT OF THE PRINCESS CHARLOTTE.

In a fine evening of July, about the hour of seven, when the streets are deserted by all persons of condition, she rushed out of her residence in Warwick House, unattended; hastily crossed Cockspar-street; flung herself into the first hackney-coach she could find; and drove to her mother's house in Connaught Place. The Princess of Wales having gone to pass the day at her Blackheath villa, a messenger was despatched for her, another for her law adviser Mr. Brougham, and a third for Miss Mercer Elphinstone the young Princess's bosom friend. He arrived before the Princess of Wales had returned; and Miss Mercer Elphinstone had alone obeyed the summons. Soon after the Royal Mother came, accompanied by Lady Charlotte Lindsay, her lady in waiting. It was found that the Princess Charlotte's fixed resolution was to leave her father's house, and that which he had appointed for her residence, and to live thenceforth with her mother. But Mr. Brougham is understood to have felt himself under the painful necessity of explaining to her that, by the law, as all the twelve Judges but one had laid it down in George I.'s reign, and as it was now admitted to be settled, the King or the Regent had the absolute power to dispose of the persons of all the Royal Family while under age. The Duke of Sussex, who had always taken her part, was sent for, and attended the invitation to join in these consultations. It was an untoward incident in this remarkable affair, that he had never seen the Princess of Wales since the investigation of 1806, which had begun upon a false charge brought by the wife of one of his equerries, and that he had, without any kind of warrant from the fact, been supposed by the Princess to have set on, or at least supported the accuser. He however, warmly joined in the whole of the deliberations of that singular night. As soon as the flight of the young lady was ascertained, and the place of her retreat discovered, the Regent's officers of state and other functionaries were dispatched after her. The Lord Chancellor Eldon first arrived, but not in any particular imposing state, "regard being had" to his eminent station; for, indeed, he came in a hackney coach. Whether it was that the example of the Princess Charlotte herself, had for the day brought this simple and economical mode of conveyance into fashion, or that concealment was much studied, or that despatch was deemed more essential than ceremony and pomp—certain it is, that all who came, including the Duke of York, arrived in similar vehicles, and that some remained inclosed in them, without entering the royal mansion. At length, after much pains and many entreaties, used by the Duke of Sussex and the Princess of Wales herself, as well as Miss Mercer and Lady C. Lindsay, (whom she always honoured with a just regard,) to enforce the advice given by Mr. Brougham, that she should return without delay to her own residence, and submit to the Regent, the young Princess, accompanied by the Duke of York and her governess, who had now been sent for and arrived in a royal carriage, returned to Warwick House, between four and five o'clock in the morning. There was then a Westminster election in progress in consequence

\* It is necessary to state this undoubted fact, that the folly of those may be rebuked, who have chosen to represent him as 'a great dinner-out.' We will answer for it that none of those historians of the day ever once saw him at table.

of Lord Cochrane's expulsion; and it is said that on her complaining to Mr. Brougham that he too was deserting her, and leaving her in her father's power, when the people would have stood by her—he took her to the window, when the morning had just dawned, and, pointing to the Park, and the spacious streets which lay before her, said that he had only to show her a few hours later on the spot where she now stood, and all the people of this metropolis would be gathered together on that plain, with one common feeling in her behalf—but that the triumph of one hour would be dearly purchased by the consequences which must assuredly follow in the next, when the troops poured in, and quelled all resistance to the clear and undoubted law of the land, with the certain effusion of blood—nay, that through the rest of her life she never would escape the odium which, in this country, always attends those who, by breaking the law, occasion such calamities. This consideration, much more than any quailing of her dauntless spirit, or fluttering of her filial affections, is believed to have weighed upon her mind, and induced her to return home.

TOOTH-DRAWING EXTRAORDINARY.—It having been noticed for some time past that one of the leopards at the British Zoological Gardens did not masticate its food as a leopard ought to do, his teeth were suspected to be at fault, and an examination was instituted, which was so far satisfactory as to confirm the previous suspicion; but about the remedy—nothing short of the extraction of the two defaulters would suffice; the removal of a tooth from one of the *genus homo* is not generally in these days considered an object of much importance—but the removal of one from a leopard—*c'est tout autre chose*—and as many of your readers will doubtless like to be informed upon the *modus operandi*, the writer will briefly describe it. With little or no apparent previous preparations, the keeper entered the den, and sitting down in the middle of it began to fondle with his patient, who seemed well pleased with his company. A sack was now handed into the cage, and in a very few seconds, and almost without the knowledge of the animal, it was fairly bagged. Two other assistants now entered the den, and whilst they held down the struggling unfortunate, the keeper was busy in cutting a hole in the sack sufficiently large to command the head of the animal; this being done, with well fixed resolution and gentleness, he proceeded to open the jaws of his patient, and having satisfied himself of the best mode of extraction, quickly drew from his pocket a formidable pair of pincers, and with most scrupulous care the instrument was securely fixed upon the fatal tooth. At this highly interesting conjuncture the animal became very violent, and its claws being at the same time unsheathed, were seen sharply protruding through the enveloping bag, and the legs of the keeper were very evidently made to feel the most enlivening sensations. Matters, however, were now drawing to a close, for the keeper grasped firmly his pincers, and with one coaxing twist of the instrument, the *tour de maître* effected the extraction, and soon held in triumph the enamelled object of his anxiety.

A SENSIBLE HINT.—"At this inn (in canton of Berne) I saw, for the first time, a strange but laudable custom: several names, fairly written out, and hung up in a conspicuous place, attracted my notice.—On inquiry I found they were idlers and spendthrifts, literally 'posted,' to prevent them getting credit from the unwary. Our waiter said they were too much in debt already. They got drunk, thrashed their wives and children, with many other interesting accomplishments. This method is often found effectual, inasmuch as it prevents them from procuring what steals away their brains; and sometimes fear and shame work a salutary reformation. Really, this plan deserves a trial in our own country. There is plenty of both room and occasion for an extensive experiment; but in all likelihood an action for libel might be sustained. Some pettifoggy attorney would doubtless take up the matter *con amore*, or on the system of 'No cure, no pay;' and many a harassing and vexatious suit would be the result. Verily, law is a great luxury, and like other luxuries, unpleasantly expensive; yet there are few but what would put up with both wrongs and grievances rather than enjoy the blessings of our excellent and impartial administration of justice:—the same laws, or equal justice for both rich and poor; redress equally open to both. 'So is the London Tavern,' was Sheridan's witty reply to this boasted privilege."—*Roby's Tour*.

The following anecdote, illustrative of the character of the late Judge Parsons, is, both in thought and language, sublime. A gentleman by the name of Time had been concerned in a duel; the ball of his antagonist struck his watch, and remained there. It thus saved his life. The watch was afterwards exhibited with the ball remaining in it, in a company where Judge Parsons was present. It was observed by several that it was a valuable watch. "Yes," said Parsons, "very excellent; it has kept Time from Eternity."

POMPEII.—A discovery of a novel description and much interest has recently been made among the ruins of Pompeii. Near the street of the Tombs, where the excavations are carried on with most industry, the vestibule of a house has been exposed, with four Mosaic pillars, fifteen feet in height. Relics so curious excite great expectations of what the house itself may contain.