

ever. While these passes were being made, the chairman inquired how the young man felt; and he replied, that he had a sensation as if electricity was passing through him. The chairman then pointing with his forefinger to the forehead of the young man, requested him to look steadfastly at his (the chairman's) finger, which he did, and in less than a minute he dropped in a "crisis." The rigidity of the muscles was as great as in the former experiment, and no doubt could be entertained that the young man was totally insensible to all that was passing around him. This was proved to the satisfaction of the society by various experiments upon the skin and upon the eye. After numerous trials of the state of his sensibility, the young man was lifted and placed erect upon his feet, and held in that position for some time, every muscle being apparently in a rigid state of contraction. After remaining for some minutes in this cataleptic state, he was roused as before by a smart blow upon the arm; and though standing still upon his feet, he appeared when thus struck to be aroused from a deep sleep, and seemed at first amazed at what was going on around him.

The chairman having been requested by the society for an explanation of the phenomena just witnessed, said, although he doubted whether a satisfactory answer could be given, it was to him perfectly obvious that the phenomena were not attributable to any new agency developed and introduced into the system of the young man, for the fit could obviously be induced by the young man himself more quickly than by the agency of another. Whatever might be the cause of the fit, it could not possibly be attributable to animal magnetism, or to any extrinsic cause. According to the chairman it depended upon a peculiar state or idiosyncrasy of the nervous system—the epileptic,—which might be called into activity by various causes, as mental emotion, imagination, a habit of recurrence by the induction of some of the *precursory* movements of epilepsy, or even by inducing a peculiar state of a single nerve. The chairman was inclined to attribute the phenomena in the case before the society to the last of these causes. A peculiar impression was first induced on the optic nerves of the young man, by the fixing steadily, and for some time, the eyes upon a given point: a state similar to that induced by pressure upon the nerves of a limb when a numbness or "sleeping" of the limb occurs. The state of the optic nerve thus induced, he conceived, was transmitted, by continuous sympathy, to the brain and whole nervous system, with its necessary effects upon consciousness and the motive and sensitive powers.

The subject excited considerable discussion, and the majority of the speakers concurred with the essayist in the views he supported in opposition to animal magnetism.—*Lancet*, 1842.

101. *Abstract of a paper on Opium smoking in China.* By G. H. SMITH, Esq., Surgeon in Penang. Communicated to Dr. Johnson by the author.—The great extent to which this destructive vice is carried on in this island, and in the straits and islands adjacent, together with the almost utter impossibility of relinquishing the dreadful habit, when once acquired, opens an immense source of revenue to the East India Company, who monopolize the sale of all quantities of opium under a chest, as well as that of arrack, serree, toddy, bang, &c. The annual average revenue of this monopoly, or "Revenue-Farms," as they are called, for ten years past, has amounted to 4822*l.* sterling. But the quantity of opium smuggled is immense and incalculable. Benares opium is that chiefly used by the farmer for the preparation of "chandoo" (the composition smoked), on account of its weight and cheapness; but the consumers prefer the Patna opium, because it has a finer flavour, is stronger, and its effects more lasting.

The following is part of the mode of preparing the chandoo. Two balls are as much as one man can properly prepare at once. The soft inside part of the opium-ball is scooped out, and the rind is boiled in soft water, and strained through a piece of calico. The liquor is evaporated in a wide vessel, and all impurities carefully skimmed off, as they rise to the surface. The same process is gone through with the soft opium extracted from the ball; and all being mixed and evaporated to the consistence of dough, it is spread out into thin plates, and

when cold, it is cut into a number of long narrow slips. These are again reduced to powder, redissolved, again evaporated, and ultimately rolled up into balls, and a good deal resemble shoemaker's wax. In this state it is fit for smoking, and is at least twice the strength of crude opium. The Chandoo, when once smoked, does not entirely lose its powers, but is collected from the head of the pipe, and is then called "Tye-chandoo," or fæcal opium, which is made into pills, and swallowed by those whose poverty prevents them from smoking the Chandoo itself.

In Penang, the opium-smokers are the Chinese, the Malays, and a very few of other nations, chiefly the native Portuguese. It is calculated that 10 per cent. of the Chinese,  $2\frac{1}{2}$  of the Malays, and about 1 per cent. of other natives, are addicted to the vice of opium-smoking. The poorer classes smoke in the shops erected for that purpose, but the wealthier orders smoke privately in their own houses. The practice is almost entirely confined to the male sex, a few abandoned prostitutes of the other sex partaking of the vice. A young beginner will not be able to smoke more than five or six grains of chandoo, while the old practitioners will consume 290 grains daily!!

The causes which lead to this dreadful habit among the Chinese are,—First, their remarkably social and luxurious disposition. In China, every person in easy circumstances, has a saloon in his house, elegantly fitted up, to receive his friends, with pipes, chandoo, &c. All are invited to smoke, and many are thus induced to commence the practice from curiosity or politeness, though few of them are ever able to discontinue the vice afterwards.

Parents are in the habit of granting this indulgence to their children, apparently to prevent them from running into other vices still more detestable, and to which the Chinese are more prone than, perhaps, any people on earth. There is another cause which leads great numbers of young men into the practice of opium-smoking, a belief, founded, it is said, on experience, that the said practice heightens and prolongs venereal pleasures. It is, however, admitted by all, that opium-smokers become impotent at a much earlier period of life than others. In painful or incurable diseases, in all kinds of mental or corporeal sufferings, in mercantile misfortunes, and in other reverses of fortune, the opium-shop is resorted to as an asylum, where, for a time at least, the unfortunate may drown the recollection of his cares and troubles in an indescribably pleasurable feeling of indifference to all around. The Malays are confident that opium-smoking inspires them with preternatural courage and bodily strength; it is, therefore, resorted to whenever any desperate act is in contemplation.

The smoking-shops are the most miserable and wretched places imaginable: they are kept open from six in the morning till ten o'clock at night, each being furnished with from four to eight bedsteads, constructed of bamboo-spars, and covered with dirty mats and rattans. At the head of each there is placed a narrow wooden stool, which serves as a pillow or bolster; and in the centre of each shop there is a small lamp, which, while serving to light the pipes, diffuses a cheerless light through the gloomy abode of vice and misery. On an old table are placed a few cups and a tea-kettle, together with a jug of water, for the use of the smokers. At one side of the door the sub-farmer, or cabaret-keeper, sits, with chandoo, pipes, &c., for the accommodation of his customers. The place is filled with the smoke of the chandoo, and with a variety of other vapours, most intolerable to the olfactories of an European. The pipe, as may be seen, is composed of a shank and a head-piece, the former made of hard and heavy wood, fourteen inches long by three inches and a half in circumference. It is bored through the centre, from the mouth-piece to the head, where there is a kind of cup to collect the "tye-chandoo."

The smokers generally go in pairs, and recline on the bedstead, with head resting on the wooden stool. The mode of proceeding is as follows:—First, one of the pair takes up a piece of chandoo on the point of a short iron needle, and lighting it at the lamp, applies it to the small aperture (resembling the touch-hole of a gun), in the head of the pipe. After a few whiffs he hands the pipe to his friend, who lights another piece of chandoo at the lamp; and thus they go on

alternately smoking till they have had sufficient, or until they are unable to purchase any more of the intoxicating drug. The fume is always expelled through the nose, and old stagers even draw it into their lungs before it is expired.

During this time, they are at first loquacious, and the conversation highly animated; but, as the opium takes effect, the conversation droops, and they frequently hurst out into loud laughter, from the most trifling causes, or without any apparent cause at all, unless it be from the train of thoughts passing through their excited imaginations. The next phase presents a vacancy of countenance, with pallor, and shrinking of the features, so that they resemble people convalescing from a fever. A dead silence precedes a deep sleep, which continues from half an hour to three or four hours. In this state the pulse becomes much slower, softer, and smaller than before the debauch. Such is the general process almost invariably observed among the Chinese; but with the Malays it is often very different. Instead of the placidity that ushers in the profound sleep, the Malays frequently become outrageously violent and quarrelsome, and lives are occasionally lost in these frightful orgies!

The chandoo is sometimes employed for the purpose of self-destruction; but from its strong smell and taste, it is never used as poison for others. It does not appear that sudden death is ever produced by an overdose of chandoo when used in smoking. When an inordinate quantity has been expended in this way, headache, vertigo, and nausea are the effects, and are only relieved by vomiting.

When a person has once contracted the habit of opium-smoking, he finds it extremely difficult to discontinue the vice; yet there are many instances of its being conquered by resolution of mind. In such attempts it is most dangerous to approach the opium-shops, as the smell of the chandoo produces an irresistible desire to indulge once more in the pernicious habit; neither can opium-smoking be suddenly abandoned without some substitute, as the most serious or even fatal consequences would ensue. The best substitute is a tincture of the "tye-chandoo" (which is about one-fourth the strength of the "chandoo" itself), made with samsoo, a spirit made from rice, and taken in gradually diminished doses, till the habit is broken.

By a continuance in this destructive practice, the physical constitution and the moral character of the individual are deteriorated or destroyed, especially among the lower classes, who are impelled to the commission of crimes, in order to obtain the means of indulging in their dominant vice.

The hospitals and poor-houses are chiefly filled with opium-smokers. In one that I had charge of the inmates averaged sixty daily, five-sixths of whom were smokers of chandoo. The baneful effects of this habit on the human constitution are conspicuously displayed by stupor, forgetfulness, general deterioration of all the mental faculties, emaciation, debility, sallow complexion, lividity of lips and eyelids, languor and lack-lustre of eye, appetite either destroyed or depraved, sweetmeats or sugar-cane being the articles that are most relished. In the morning these creatures have a most wretched appearance, evincing no symptoms of being refreshed or invigorated by sleep, however profound. There is a remarkable dryness or burning in the throat, which urges them to repeat the opium-smoking. If the dose be not taken at the usual time, there is great prostration, vertigo, torpor, discharge of water from the eyes, and in some an involuntary discharge of semen, even when wide awake. If the privation be complete, a still more formidable train of phenomena take place. Coldness is felt over the whole body, with aching pains in all parts. Diarrhœa occurs—the most horrid feelings of wretchedness come on; and if the poison be withheld, death terminates the victim's existence.

It is generally remarked, as might, *à priori* be expected, that the offspring of opium-smokers are weak, stunted, and decrepit. It does not appear, however, that the Chinese, in easy circumstances, and who have the comforts of life about them, are materially affected, in respect to longevity, by the private addiction to this vice, so destructive to those who live in poverty and distress. There are many persons within the sphere of my own observation, who have attained the age of sixty, seventy, and more, and who are well known as habitual opium-

smokers for more than thirty years past. It is a well-known fact, that the present Emperor of China was a slave to the pernicious habit of smoking opium for many years; but that, by great moral courage and perseverance, he weaned himself from the vice, and has ever since become a most violent persecutor of those who are addicted to the indulgence. He accordingly issued edicts of severe punishment against the smoker, vendor, importer, and all concerned in the traffic of opium; and, finding these ineffectual, he made the crime capital, and punished it with death. Whatever may be said in favour of the opium traders, and against the policy or justice of the Chinese emperor, I am convinced in my own mind that the real object of his edicts was the good of his subjects, and that he hoped, however vainly, to eradicate a vice destructive alike of the health and morality of those who become its victims. But his majesty's government acted on very different principles; namely, the most selfish, venal, and mercenary. It is a notorious fact, that many, perhaps most of the officers, employed in preventing the importation and smuggling of opium, are themselves opium-eaters, or opium-smokers, and consequently that they wink at the illicit trade, or take bribes of opium or dollars for the introduction of the drug. It is well known now, that in several of the southern provinces of China, opium is cultivated to a great extent, without any check from the local authorities, and, doubtless, without any knowledge of the emperor himself. The propensity to opium-smoking is becoming so universal and so irresistible in China, that no sumptuary laws, however sanguinary, will be able to stem the torrent. In Penang excessive duties have only increased the thirst for opium, and what is worse, they have quadrupled the number of murders and other crimes committed in order to obtain the means of procuring the drug!\*

Pulo Penang, Straits of Malacca.

*Note by Dr. Johnson.*—The foregoing paper has been laid before the society, partly because the subject is curious, and little known in this country, but chiefly for the purpose of offering one or two practical suggestions to the members.

First, I think it will be admitted that the Chinese mode of taking opium by smoking or inhalation, induces the peculiar sedative effects of that drug more powerfully and more speedily than when taken into the stomach.

Second, There can I believe, be little doubt, that these effects are produced chiefly, if not entirely through the medium of the nervous system, and not by digestion, absorption, and the circulation.

Third, It does not appear that the casual or temporary smoking of opium is more dangerous or injurious to the constitution than that of swallowing the drug, whether in substance or solution. On the contrary, I believe it is less so, and not so likely to impair the functions of the stomach, liver, and bowels, as when directly applied to the digestive apparatus.

Fourth, The *habitual abuse* of a drug, by which, in fact, it is converted into a poison, is no argument or reason against its occasional exhibition as a remedial agent.

Fifth, If the above observations be admitted as rational, I see no reason why we should not employ the Chinese mode of inhaling the fumes of opium, in certain dangerous and painful maladies where the common mode is found to be inefficient, and attended with great derangement of the digestive organs. It is clear that we can very seldom induce that profound sleep and insensibility to all mental misery and corporeal pain, by opium taken into the stomach, which we find to be produced by the inhalation of its fumes acting directly on the brain, through the medium of the nerves. Might not the Chinese mode, then, be adopted in tetanus, hydrophobia, tic-douloureux (especially of the facial nerves), violent spasms, and painful diseases that defy the power of opium taken in the common way?\*

\* This idea has been acted on in France for several years. The cigars, which are made for this purpose, have also been imported into this country, and we have used them in several cases of tic douloureux, and sometimes have found them to afford great relief to the patient.—Ed.

The various preparations of opium might be easily smoked by means of a common pipe, and the powerful effects induced in a very short space of time, without the possibility of their being rejected by the stomach, or prevented from acting energetically on the sensorium, and throughout the whole nervous system.—*Med. Chirurg. Rev.* April, 1842.

102. *The Bavarian Schools of Medicine suspended.*—The Home Secretary of State in Bavaria has recently forwarded an ordinance to the three universities of that kingdom, enjoining them to close all the schools of medicine. The motives of this injunction are stated to be the fact that more medical men exist than can find occupation, and there are 700 applications to the minister from young medical men who seek employment.

103. *Desertion of children in France.*—MM. TERME and MONFALCON state that in large manufacturing districts, and among artisans, the parents separate themselves from their children, with a most lamentable carelessness, and look on it as infinitely more convenient and desirable to take their children to a hospice, and to forget them, than to trouble themselves about bringing them up. M. Lelong, a member of the general council of the Seine Inferieure, states that in some neighbourhoods the number of foundlings has equalled, and sometimes even exceeded, the number of children born out of wedlock. At the Hotel-Dieu, at Lyons, there is a lying-in ward for the wives of the artisans, in which from 500 to 600 are delivered annually. More than 60 of these women are detected every year by the vigilance of the police, in their attempt to send their children to the hospice, and are compelled to take them back again. Many elude the officers, and succeed in getting rid of their children. 2,000 are admitted every year into the foundling hospital at Lyons, and of these 400 are considered to be legitimate. During the twenty years from 1816 to 1835, 57,400 women have been delivered in the Maternité, at Paris, and 19-20ths of them sent their children to the Hospice des Enfants trouvés.—*B. and F. Med. Rev.* April, 1842.

104. *University College, London.*—Dr. Murphy, late assistant physician to the lying-in hospital, Dublin, has been elected to the professorship of Midwifery in this Institution, in the place of Dr. Davis recently deceased.

105. *Obituary Record.*—We greatly regret to have to record the death of Sir CHARLES BELL, which took place suddenly on the morning of the 29th ult., at Hallow Park, near Worcester, the residence of Mrs. Holland, whom the deceased and Lady Bell were visiting on their way to Malvern.

Sir Charles had been subject to pains about the chest of a spasmodic nature, and latterly assuming the characters of angina pectoris. He had been very unwell at Manchester a short time before, and had suffered much from pains in the stomach during his visits at Hallow; but appeared quite as well as usual on the 28th, and had been out for a considerable time during the day. At night the pains again became severe, but no danger was apprehended until 8 o'clock on the morning of the 29th, when he became rather suddenly very quiet, and Lady Bell, greatly alarmed, sent for Dr. Carden, of Worcester, who, on his arrival, found him quite dead, with the appearance of life having been for some time extinct.

Sir Charles was 67 years of age, and, with the exception of the complaint which proved fatal, retained considerable vigour and activity. He was out sketching on the 28th, being particularly pleased with the village church, and some fine trees which are beside it; observing, that he should like to repose there when he was gone. On Monday last, being just four days after this sentiment had been expressed, his mortal remains were accordingly deposited beside the rustic graves which had attracted his notice, and so recently occupied his pencil.—*Lond. Med. Gaz.* May 1842.

We notice with regret the death of the venerable Dr. YELLOLY, which took