we exclude that insight of the understanding which is called intuition, because it is a part of its own innate energy which depends neither on memory nor the senses, though called into activity through their exercise. There can be no difficulty, then, in admitting that the disease under consideration exists in the only other set of faculties remaining; that its *exciting cause* is disease of the material organ in which they inhere; and that its *proximate cause* is a perversion of the logical understanding, and through it a perversion also of the feelings and the will. Insanity, then, may be defined as—a dangerous misconception of one's personal relations, either persistent or with lucid intervals, and with or without illusions of the senses.

It will give more completeness to this sketch if I add, that a true conception of the understanding is an idea or belief in conformity with the nature of things, and that the class of misconceptions may be tabulated as under:—

MISCONCEPTION.

1. In matters common to all men: *Error* and *Ignorance*.
2. Peculiarities gradually acquired from circumstances: *Eccentricity*.
3. Peculiarities suddenly or recently coming on from disease: some forms of *Monomania*.
4. In which liberty is dangerous to the Individual and to Society: *Insanity*.
 - a. From destruction of all mental power—*Dementia*.
 - b. From general weakness of mental power; viz., inadequate conceptions, blunted emotions, and feeble will—*Amentia*.
 - c. Strongly exciting or perverting the instincts, emotions, and will—*Mania*, *Monomania*, *Dipsomania*, *Impulsive Madness*.
 - d. Depressing the instincts, emotions, and will—*Melancholia*.

TREATMENT OF DIABETES MELLITUS.

By T. INMAN, M.D., Liverpool.

It is desirable that contributions, however small, should be made from time to time respecting any new plan of treatment proposed for severe and almost intractable diseases. As yet we have had few reports upon the practice adopted by Dr. Budd, of Bristol, in diabetic cases, although it was one eminently deserving of consideration.

I have, in my hospital experience, had four cases of diabetes mellitus under my care; two prior to the publication of Dr. Claude Bernard's researches, and the promulgation of Dr. Budd's views; and two since. Of the first two, I will only say that the patients went out of the hospital worse than when they came in, although no attempt was spared to benefit them.

The last two cases came to very different conclusions. I may, for the sake of brevity, describe both patients as being labouring men, about 40 years of age—ill for many months. The quantity of urine passed was over twenty pints daily, the specific gravity 1,045; the presence of sugar was ascertained by fermentation and other tests. Emaciation was considerable; and thirst great. Both had been under dispensary treatment before their admission. In adopting a plan of treatment I was guided by the following considerations:

1. The liver naturally produces sugar in a definite quantity. In diabetes there is an excess of sugar, and we may fairly infer that it comes from the liver. Opium has a decided effect in diminishing the bile producing or secreting function of the liver, and it is reasonable to suppose that it will reduce the sugar-forming function. Experience has long told us that no single remedy in diabetes has been so efficacious in diminishing the quantity, etc., of urine passed, as opium. Opium, therefore, should be one ingredient in the treatment.

2. Again, Bernard has shown that the liver makes sugar, no matter what is the nature of the food employed. Dr. Budd has shown that some patients, at least, may be benefited by saccharine food. But my patients did not long for sugar; and they did enjoy their ordinary food; consequently I neither restricted them to non-saccharine, or non-amylaceous diet, or prescribed unusual quantities of sugar. They were to have the ordinary full diet of the hospital, but more in quantity if they chose, either of bread, meat, or potatoes.

3. Again, it seemed to be clear that in diabetes, there was debility, implicating more or less the whole system; that there was danger of death by consumption; that the digestive

powers, notwithstanding their apparent energy, must be impaired; at any rate, that opium was liable to disorder the stomach, and that it could be tolerated in larger quantity if combined with quinine.

The result of these considerations was the following prescription for a pill:

Opium, one grain; quinine, two grains; to be taken every four hours. Full house diet, with porter daily.

The effect of this was soon apparent. The men began to improve rapidly and steadily; the urine diminished until it stood at ten pints only per day, with a specific gravity of 1,035. Commensurately with this, their strength and spirits increased, and they gained in flesh considerably. The opium never affected the head except on one occasion, when the patient, hoping to expedite his recovery, took a double dose. The bowels were habitually regular. The plan of treatment was neither varied or altered during their residence in the hospital. They remained under notice, the one about three months, the other for six weeks. Both left the house of their own accord, as they considered themselves sufficiently cured, and competent to do their ordinary work. I have seen one since he went out, and found that he continued strong, and, as he thought, well.

Of course I do not imagine that these two cases are sufficient to upset our older notions of the correct treatment of diabetes. I merely offer them as a small contribution to our general therapeutical stores.

I may just mention, as a curious fact, that one of my unsuccessful cases found that he received more benefit from a diet of raw beef than from any other thing dietetic or medicinal which he had taken; and that every new medicine did him good for about two days.

REMOVAL OF AN INVERTED UTERUS.

By J. BOWER HARRISON, M.D., Higher Broughton, Manchester.

In the *Medical Gazette* for April 1840, I published a case of the successful removal of an inverted uterus. At the period at which the case was published, only a comparatively short time had elapsed since the performance of the operation. It may be interesting, therefore, to supply, at the present time, such particulars as I am able to collect respecting the final success of the case.

I am more especially induced to offer these particulars, as the case itself seems to have escaped the notice of many who have directed their attention to this subject. In a paper, for example, which appeared in the *Medico-Chirurgical Transactions* for 1852, on the Inversion of the Uterus, by Dr. Gregory Forbes, no allusion is made to my case, although the paper professes to contain a complete record of what has been published in relation to this disease. I must acknowledge, however, that Dr. Forbes afterwards did me the favour to write me a letter in which he regretted the omission, and expressed his wish to supply the defect by a supplementary notice.

Some time subsequent to the operation, which I related in the *Medical Gazette*, my patient left Manchester, and I unfortunately lost sight of her. This I regretted, though I had every reason to suppose that she was in good health, for my friend Mr. Crosse of Norwich wrote to me in July 1844, expressing a wish to have full particulars of the case. He says, "I have for some time been attending to the subject of *inversio uteri* (having had a successful case of removal of that organ), with a view to writing a comprehensive essay thereon. By some great oversight, I was not cognisant of your excellent case detailed in the *London Medical Gazette* of April 1840. I hope you will excuse me for putting to you the subjoined queries, in further illustration of your case," etc.* Mr. Crosse happily discovered the patient himself, for, in December of the same year, he writes me word, "I do not think I have before informed you that my particular friend Mr. Samuel Smith, Senior Surgeon to the Leeds Infirmary, has found your extra-uterine patient, and sent me full particulars about her present state. She continues in good health, as do several others in this country whom I have seen. The gradual method you pursued, in removing the uterus by ligature, coincides precisely with my own ideas as to the best way to do it with success."

In a letter which Mr. Crosse wrote to me in June 1845, he says, "I was lately at Leeds, and saw your extra-uterine

* The original letters are in my possession.

patient, who was quite well. Dr. Radford sent me a drawing of the uterus you removed—a very interesting drawing; but, if I publish it, the last part of my essay, the treatment by excision of the organ, will be the place: therefore, no allusion to your case has yet been made admitting of the drawing." It seems that my patient did not continue to reside in Leeds; for, in answer to an inquiry which I made respecting her, the other day, Mr. Smith, of Park Lane in that town, kindly wrote to me, "I have by accident seen the person with whom your patient lodged when in Leeds, and found that she has removed to Huddersfield; and the address is, Mr. John Morris (her husband), Ginger-Beer Manufacturer, Zetland Street, near King Street, Huddersfield. Your patient is living, and in good health. I remain, my dear sir, yours truly, Samuel Smith."

This last letter, therefore, brings the information up to the present period—a space of upwards of eighteen years after the performance of the operation; and establishes without doubt the claim of this case to being ranked among the successful instances of removal of inverted uterus.

CASES ILLUSTRATING DISEASES ARISING FROM LONG CONTINUED RESIDENCE IN INDIA.

By WILLIAM HENRY ASHLEY, M.D. Edin., F.R.C.S. Eng.,
Honorary Surgeon to the Kensington Dispensary.

ALL our experience and knowledge of the processes and phenomena of disease begins with individual cases; and the truth is brought nearer to our comprehension by collecting numerous examples under the greatest possible variety of circumstances. This can only be accomplished by the combined exertions of numerous observers. We are thus enabled to distinguish what has uniformly occurred in all cases, conjointly or consecutively, and what has not transpired, and finally to determine constant coincidences from those which are merely fortuitous.

CASE I. Atrophied Granular Induration of the Liver. The subject of this case was a lady aged 56, of regular and very temperate habits, whose constitution had been enfeebled by residing many years in Calcutta, and who had lately returned to England in an impaired state of health, having suffered occasionally from disorder of the digestive organs. Towards the termination of 1854, a marked declension in the state of her health became apparent; and when she placed herself under my care in January 1855, she was complaining of indigestion, abdominal pulsation, emaciation, debility, insomnia, and depression of spirits.

February 1, 1855. The face and body were generally pale; she had loss of appetite, considerable feebleness, severe and almost persistent epigastric pulsations, synchronous with the heart's action, no sense of weight or pain in the region of the liver; the entire abdomen was unaffected by strong pressure; the tongue was clean; the pulse feeble and somewhat irritable, 95; the skin dry; the urine high coloured; the stools natural and costive. No cardiac or pulmonic disease, or enlargement of the spleen, could be detected.

The progress of the affection was slow but continuous; from the commencement of March, the symptoms became more severe, and on the 11th of that month, jaundice supervened, and remained persistent until her death, which occurred on the 1st of October following. Simultaneous changes were now observed; the urine appeared charged with bile, and the alvine dejections were no longer tinged with dark matter, but became light and clay coloured. The new formation of connective tissue could now be readily distinguished by tactile examination through the exceedingly attenuated parietes of the abdomen, in the form of callosities, indicating a state of degeneration into granular atrophied induration of the liver; but the development of this callous tissue did not become apparent to the touch before the supervention of the jaundice. The symptoms resulting from the impermeability and obliteration of the secreting tissue, bore a certain progressive ratio to the degree of hepatic induration, and were chiefly characterised by tabes, anæmia, and (shortly before death) by ascites. Concurrently with the development of these symptoms, might be observed a dark yellow greenish tint of the skin pervading the whole body; the icteric urine was of such intensity of colour, as to assume a blackish or inky hue, and the biliphaïn in solution, tinged linen of a dark yellow dye. The usual tests failed to discover any trace of albumen. Towards the termination of the disease the symptoms became more complex and aggravated. There were occasional paroxysms of severe pain

in the liver, a constant bitter taste in the mouth, and almost daily, at an early hour in the morning, vomiting of bilious matter, occasionally complicated with hæmatemesis. The pulse now became very irritable, often exceeding 130 beats in the minute, and petechiæ appeared on the superior and inferior extremities. The extinction of vitality was very protracted, and accompanied by the manifestation of exalted reflex actions, the functions of the sensorium remaining unaffected until two days before death.

REMARKS. In the early stage of the malady, the dyspepsia was relieved by bismuth, soda, henbane, and prussic acid; and due action was maintained on the chylipoietic viscera by the use of mild mercurial and aloetic medicines. After the supervention of jaundice, the mineral acids, and various preparations of quinine and iodine were administered; and the nitromuriatic acid bath was persevered in for a lengthened period. The acids were employed with a view of acting on the absorbent and excretory systems, and arresting the hepatic degeneration; at the same time, that they might also serve to oxygenise the vitiated blood.

The setting in of this insidious and dangerous affection was marked by dyspeptic symptoms of a very intractable nature, together with considerable marasmus. At this early period of the disease, there existed no abdominal pain; but the comparative benignness of the symptoms was of short duration, and the development of hepatic disease soon became patent and determinable. It is a remarkable circumstance that the system should have been surcharged with bile for a period of eight months, and that, in spite of the protracted duration, there was an entire absence of coma or any cerebral complication, until forty-eight hours before death. In accordance with that vicarious but conservative law of nature, observed sometimes in diseased conditions of the system, the kidneys became the excreting emunctories of bile-pigment, and to a certain extent compensated for the loss of vital power in the peccant organ.

In this instance we have an exemplification of the system tolerating the presence of a noxious agent with impunity for an unusually long period. Cholemia in this respect differs from uræmia; the concomitant circumstances and influences are too complicated, and the importance and office of each individual agency are not sufficiently known to enable hematologists to determine the causes of this divergence and variation in the symptoms. Perhaps the fact of urea containing more nitrogen than any other animal product, may serve in some measure to explain its pernicious effects; how frequently is cephalœa attributed to derangement of the liver, when the cause may be found in functional disorder of the kidneys; the *materies morbi* depending on excess of uric acid in the blood, too often induced by sedentary habits and over stimulating food. Werner asserts that bile, added to fresh drawn blood, prevents its coagulation; and to its presence in the living body may be ascribed in some measure that condition of system frequently terminating in dyscrasial anæmia, marked as in the present case by the appearance of petechiæ on the surface of the body.

The obstruction and interruption to the flow of blood through the liver frequently induces disease of the heart, but in this instance there was no hypertrophy or valvular lesion. The peculiarly excited pulse was partly due to the constant effort of the heart to propel the blood through the indurated and almost impermeable hepatic tissue, to cardiac irritation set up by the presence of bile in the circulating fluid, and also to sympathetic reflex action induced by the formidable nature of the hepatic lesion.

To climatic influences we must in this instance ascribe the origin of this incurable form of disease. It is seldom the practitioner meets with an example, so complete and well defined in all its stages of progressive development, frequently one or more of the important symptoms are absent, but in this case all the salient points necessary for the purpose of accurate diagnosis, present themselves to our notice.

CASE II. Chronic Dysentery. Mrs. B., aged 40, of spare habit, after a residence of many years in India, returned to England in July 1855. She first complained of dysenteric symptoms on board ship in the Bay of Bengal, March 1855; and the disease had now continued for twelve months without any intermission. During the last nine months, she had resided in Scotland; but finding the climate ungenial, and her disorder increasing in severity, she removed to London.

March 31st, 1856. Her symptoms were excessive emaciation and prostration of strength, dryness of skin, anxious countenance, sallow complexion, pulse 90, small and feeble.