CASE 32.—Æt. 34, wounding. A violent, insolent man, has sixteen offences for theft recorded against him; when being chased by a man who surprised him stealing he fired a revolver at him. Vision: R., L. $\frac{6}{6}$; no colour-blindness; hearing: R., L. 10 inches; smell: $\frac{1}{200}$; taste: $\frac{20}{480}$; touch: 2 inches.

CASE 33.—Æt. 38, theft. Has not done any honest work, and has been sent twice to penal servitude besides undergoing short sentences for theft. Vision: R. $\frac{6}{18}$, L. $\frac{6}{6}$; no colour-blindness; hearing: R., L. $\frac{1}{2}$ inch; smell: *nil;* taste: *nil;* touch: $2\frac{3}{10}$ inches.

CASE 34.—Æt. 45, burglary. Has previously served four short sentences for theft, and one previous sentence to penal servitude for burglary; on release he was almost immediately convicted. Vision: R., L. $\frac{6}{6}$; no colour-blindness; hearing: R., L. 2 inches; smell: $\frac{1}{100}$; taste: $\frac{10}{480}$; touch: $1\frac{7}{10}$ inches.

CASE 35.—Æt. 52, fraud. Has been previously sentenced for fraud, and immediately on release commenced carrying out another similar system. Vision: R., L. $\frac{6}{6}$; no colour-blindness; hearing: R., L. 1 inch; smell: $\frac{1}{80}$; taste: $\frac{40}{480}$; touch: $2\frac{3}{10}$ inches.

Clinical Notes and Cases.

Three Cases of Melancholia with Symptoms of Unusual Clinical Interest. By R. R. LEEPER, F.R.C.S.I.

THE following cases of melancholia were recently treated at St. Patrick's Hospital, and as they presented unusual symptoms, the study of which possibly may help us to a better conception of the causation of some delusional states, or may throw some light upon the condition of so-called non-diabetic glycosuria amongst the insane, I beg to record them.

CASE 1.—H. J. L—, admitted to St. Patrick's Hospital, October 20th, 1899. Her father was insane and her mother a very neurotic and anxious woman. Her attack was of six months' duration, and was attributed to the anxiety and monetary difficulties which were consequent on her father's illness.

She had been a clever, accomplished, and industrious girl. On admission her palate was highly arched and abnormal, her bowels constipated, and her abdomen tympanitic. Catamenia were absent for two months prior to her admission. The examination of her urine shortly after admission showed a quantity of sugar to be present, sp. gr. 1030, but no noticeable increase of quantity passed per day. Heart normal. Her pupils were widely dilated and reacted sluggishly

to light. Her reflexes were diminished; her weight 6 st. 11 lbs. She could write a coherent letter, well spelt and well written, but entirely expressive of her delusions. These were of a very distressing character —all her relations were dead or were being killed as the result of her wickedness. She believed she was the source of all evil, and suffered from hallucinations of taste and smell, believed she was compelled to eat portions of her father's and mother's bodies, and that the legs of mutton served for dinner were the limbs of her parents. Her case was diagnosed as one of acute melancholia, and the prognosis, notwithstanding her insane inheritance, was favourable. Her urine, two days after admission, was again examined and a large quantity of sugar was still present. Her state was one of extreme delusional anxiety; she was continually wringing her hands and lamenting the sad fate of all belonging to her, who were being massacred outside the hospital walls.

On November 1st she was ordered codeia in 1-gr. doses three times a day; under this treatment the excitement became less, and the quantity of sugar diminished.

On November 30th the codeia was discontinued; the specific gravity of her urine, which had been reduced to 1015 whilst taking the drug, now rose again to 1030. She refused food, and required to be forcibly fed for several days. The note at this time in the case-book is that she "shows no sign of mental improvement, is very resistive and depressed." The total quantity of urine passed per day is slightly subnormal, 2 pints 2 oz. being the maximum quantity excreted in twenty-four hours, which still contains a quantity of sugar whenever the codeia is discontinued.

During the next two months there was a gradual gain in every way. The urine was free from sugar. She gained in weight, and her expression became less melancholic. The dose of codeia was reduced to 1 gr. per day, and as symptoms of recovery became more manifest and the sugar remained absent the drug was gradually discontinued, and iron and aloes were exhibited, as she had not menstruated since her admission, and on February 7th the catamenia reappeared. From this time onward she made an uninterrupted recovery, and was discharged recovered on March 2nd, 1900, four months and eighteen days from date of admission. Her weight had increased by 1 st. 9 lbs.

In this case the disturbed digestion, the delusions in connection with food, and the presence of sugar in the urine are to be borne in mind in connection with the remarks to be made hereafter.

Case 2.—H. M—, æt. 52, was admitted June 9th, 1900. She was the mother of eight children, had had much trouble in her life, and latterly became very irritable and hypochondriacal. She was refusing her food, as result of the delusion that her bowel was obstructed and that all her food lodged in her stomach. She was extremely emaciated and depressed mentally, with great restlessness. For a long period before her admission she had lived on a diet of tea, bread, and cakes, believing that all other articles of diet caused obstruction. Her pupils were

irregular and sluggishly reacted to light. Her reflexes were normal, her abdomen retracted, her bowels regular in their action. She was induced to take a sufficient quantity of milk diet after a little difficulty. She was ordered ½ gr. codeia every day and cod liver oil, was sent out driving, and kept in the open air as much as possible. Her weight on admission was 5 st. 9 lbs.

On July 13th she had gained 3 lbs. in weight, was sleeping well, and there was merely a trace of sugar in the urine.

On August 1st the codeia was discontinued; she had increased 4 lbs. in weight, and on August 31st there is a note in the case-book that there was no trace of sugar in the urine for the past three weeks.

On September 1st she had entirely lost the delusion of obstruction, which appeared to have become during the early months quite fixed, and she was discharged recovered three months and two days from the date of her admission to the hospital.

CASE 3.—J. R—, male æt. 42, came to hospital asking to be admitted. He was in an extremely weak state, having travelled to Dublin from the west of Ireland, and having had no food since early morning of the day he sought admission. This was the third attack of mental disease from which he had suffered, but he had never before been admitted to an asylum. His present attack was stated to be due to long nursing of his mother. As well as I could ascertain, his first attack lasted only a month. His second attack of mental depression occurred at the age of twenty-three and lasted about a year, and the present attack was of fourteen days' duration. No hereditary history of insanity was obtainable.

On admission he was found to be in an exceedingly weak state; pulse 130, very weak, and compressible. His heart and lungs were normal. His pupils were dilated, but regular and contractible. Weight 9 st. His mental state was one of extreme delusional anxiety: he stated that he was lost, that his stomach was drawn in so that he could not speak, and that his bowels were hopelessly obstructed and that nothing passed through them. His abdomen was retracted and his skin hot and perspiring. His urine was examined immediately on admission, and I found it to contain a quantity of sugar, sp. gr. 1034, very high coloured, and scanty; no albumen present. His anxiety and distress increased from the time of his admission. He kept continually bemoaning his fate, stating that he had come too late for anything to be done for him, and ground and gnashed his teeth together. He was kept in bed, and a mixture of digitalis and nux vomica given, and his diet consisted of as much milk as we could induce him to take. A dose of sulphonal procured him sleep at night.

On July 9th his pulse became very rapid and his condition critical. He passed into a comatose state during the night, and on July 10th he was in a state of coma. His urine, which was drawn off with the catheter, contained a quantity of sugar. His lips and mouth were covered with sordes; a herpetic eruption appeared on his face, and ecchymotic patches appeared on his toes. I ordered him enemata of turpentine, tepid sponging and hot-water bottles to his feet and lower limbs, and did not expect him to live through that night.

On July 16th he had gradually regained complete consciousness, had passed urine for the previous twenty-four hours, which still contained a quantity of sugar; the heart's action had always been rapid, and his pulse was now 124, very weak and thready, but regular.

On July 21st his urine, which had shown a marked diminution in the quantity of sugar, was entirely free from all trace of it; he seemed brighter, and inclined to converse with the attendants.

On August 8th he had completely recovered from his comatose state, and his case appeared to be one of agitated melancholia with delusions of obstruction.

He was sent for daily drives and walks, and ordered a fattening and nourishing dietary with cod liver oil and hypophosphites with strychnine. Digitalis in large doses failed to produce any effect in quieting the heart's action, the bromides were alike useless in procuring cardiac calm; codeia and opium were given with similar results, and belladonna also proved of no value in slowing the pulse to a normal rate. As the amount of urine excreted daily was subnormal, and the pulse exceedingly rapid with an increased tension, I ordered a saline enema of tepid water to be administered nightly without producing any effect upon his condition other than that of causing him some satisfaction, as showing that he had at last convinced me that his bowel *was* obstructed.

His urine remained free from sugar, but his delusions of obstruction were intense, and although he was able to go for short walks in the country and into town he never seemed to lose them. He gained strength gradually and his weight steadily increased. His friends removed him to another institution for the insane on March 12th of this year, thinking to further benefit him by the change. For the eight weeks previous to this no sugar was to be found in the urine or any symptom of a diabetic character. His bowels acted regularly and he gained steadily in weight, but the delusion of obstruction, I fear, remains with him, although it is much less intense than formerly and may disappear entirely as he gains strength.

These three cases all suffered from a condition of non-diabetic glycosuria; their delusions were all of a depressing character, and pointed to disturbed innervation of the splanchnic area. In two of the three cases a disappearance of the sugar from the urine marked the period of the commencement of recovery, and, in the last case, of physical and mental improvement.

I will not assert that the treatment by codeia was the only cause of this change, but it seemed to greatly benefit the first two cases, and the sugar disappeared from the urine shortly after the exhibition of the drug. Dr. Clouston has found that degeneration of the solar plexus occurs in patients suffering from delusions of obstruction of the bowel.

Whether this degenerative process is always present, and

precedes the delusional state, or whether the delusion is resultant from a disturbance of the general innervation and subsequent degeneration of the nervous system situated in the abdominal cavity, must at present remain an obscure but possible cause of the delusion of obstruction of the bowel in these patients. If the splanchnic is cut and its proximal end stimulated, sugar will appear in the urine. A wider knowledge of the results of the innervation and physiological character of digestion must assist us in our study of the causation of delusional or particular melancholic states.

The three cases I have recorded are instructive, as showing how important as a means of directing treatment is an early recognition of any abnormality in the excretions of the insane, and this seems to have been recognised at a very early period, for we find that the first thought of those beholding with alarm the mental symptoms shown by Malvolio "was to fetch his water to the wise woman," a female in the Elizabethan age who seems to have occupied the position of the physicist of to-day. If we study the causation of the delusions, the feelings of exultation and depression which gather in the minds of those to whom it is our daily duty to minister, we find our highest and most difficult labour. The student of the causation of delusion must early realise that this most obscure subject is closely connected with physiological chemistry, and particularly with those chemical decompositions, neurotoxic in character, resulting from the pathological irritation of nerve tissue with subsequent disorganisation, atrophy, and degenerative change.

Read at the Annual Meeting of the Medico-Psychological Association, Cork, 1901.

Two Cases of Syphilitic Idiocy.

By L. HARRIS LISTON, M.D., Assistant Medical Officer, Exeter City Asylum.

CASE I.—E. W—, æt. 27 years, presents the following signs of congenital syphilis. As a whole the skull is large, forehead square, frontal eminences very prominent, bosses on the parietal bones, bridge of nose broad, at angles of mouth are radiating linear scars, the upper central incisors are dwarfed, pegged, and notched. Two years ago she had an attack of interstitial keratitis beginning in one eye, and after two weeks affecting the other.