back to prison, and is at the disposition of the new experts until they have made their report.

In concluding this description of the French law, I may add that the French physicians, while allowing that some improvements might be introduced, regard the general course of procedure as excellent. One cannot but be struck with the pains taken by the Legislature to avoid a hasty judgment; and when I compare this with our own practice, I am inclined to think that "they manage these things better in France." The English think it better, if they call in experts at all, to do so *after* the trial; the French *before*.

In conclusion, I wish to anticipate an objection which may possibly be made to the proposal to rely mainly upon written evidence on the part of the experts, namely, that it is merely in order to shield them from fair cross-examination. I provide, however, for any question being asked by or through the judge, and, if it must be, by counsel. Hence there would be the same opportunity as now for the examination of the medical witness in addition to his written report. I wish to secure a calm statement in writing in the first instance, but not to avoid a fair questioning afterwards—judicial, not captious; and I bring forward this as well as the other proposals, as putting in a claim for science before our tribunals, in the interests of humanity.*

CLINICAL NOTES AND CASES.

Notes of a Case—Mania followed by Hyperæsthesia and Osteomalacia. Singular family tendency to excessive constipation and self-mutilation. By James C. Howden, Montrose Royal Asylum.†

J. C., a mason's wife, æt. 26. First admitted to the Montrose Asylum 6th March, 1855, labouring under acute mania. No special cause alleged, except a feeble constitution inherited from a mother mentally and physically weak. Had been ill for some days before admission. Imagined that God ordered her to mutilate herself.

* This paper was read at a Quarterly Meeting of the Medico-Psychological Association, in London. For discussion upon it, see "Journal of Mental Science," vol. xxvi, p. 126. Shortly afterwards Dr. Chapin, of the Willard Asylum, N.Y., read a paper before the American Association on "Experts and Expert Testimony," which led to an interesting debate.

† Read at the Edinburgh Quarterly Meeting of the Medico-Psychological Association, November, 1881.

Attempted to pull out her tongue, and on being restrained, she pushed it out of her mouth, and suddenly clenching her teeth, bit a large portion off.

She had a brother in the asylum, who was admitted on the 10th November, 1854, at the age of 22. He presented symptoms similar to his sister, especially in the tendency to self-mutilation, having gouged out one of his eyes.

J. C. was described by her friends as having always been weakly and unfit for much exertion. She had had two children, but could only nurse them for a short time, and after the birth of each had to keep her bed for three months. She recovered, and was discharged on 2nd January, 1857. From this date she remained at home till 30th December, 1867, when she was readmitted. In the interval she had two children, and after the birth of each made slow recoveries.

On this second attack the records of her condition are more complete. Her height is stated 5ft. 4in.; weight 164lbs. She was stout and healthy-like. Pupils somewhat dilated. On admission she was maniacal and suicidal. Her delusions were of a religious character. She thought God had ordered her to burn herself in order to purify her soul, which would then appear in heaven of pure gold.

She refused food, stating that it was unclean, and that she was forbidden by God to eat it. She also stripped herself of her clothing, as He had commanded her to be naked. She made persistent attempts to tear out her tongue. For two days after admission she took no food, and her bowels were not moved. She got castor-oil, which did not operate, and it was only after repeated and copious enemata that a great accumulation of impacted fæces was removed from the rectum. She now took a little food, but her stomach was very irritable, and she frequently vomited.

January 8th, 1868.—Digestive system still in an unsatisfactory state; bowels costive, stomach irritable. Takes her food better.

On 13th January she is reported better, mentally and bodily. From this date she gradually improved, and was discharged recovered on 27th March.

On 24th August of the same year she was readmitted. She seemed in good bodily condition, but her stomach and bowels were disordered as before. She vomited everything she took, and her rectum was impacted with fæces. Her urine was slightly albuminous. She had her old delusions that the food was unclean, the flesh being of animals which God had forbidden her to eat or touch. God had also ordered her to tear out her tongue, and to destroy herself. She was very restless and excited. She had several wounds and bruises on her arms, the result of attempts to injure herself. The third night after admission she pushed her hand into her vagina, which she lacerated severely, producing profuse hæmorrhage. On the evening of the 28th she was calm, and took her tea of her own accord. When she went to bed she slept till 12 o'clock, when the attendant noticed her lying

on her face, and discovered that she was gouging her eyes out. Both eyes were much injured; the left one being pushed almost completely out of its socket. (The sight of this eye was permanently destroyed.)

She continued after this very excited for some time, and showed incessant tendency to self-mutilation, especially to have her tongue torn out.

On 12th September she is reported as quiet, taking her food well, and working a little.

In the summer of 1869 she had a slight attack of pleurisy, from which she recovered to a certain extent, though her health was never good afterwards.

In February, 1870, she is stated to retain delusions similar to those she had on admission.

On 2nd April, 1872, it is reported that she lies constantly in bed complaining of pain in different parts of her body. She cries out when any one touches her. From this date to her death, in February, 1877, she lay constantly in bed on her back. Hyperæsthesia was very remarkable. The slightest touch on any part of her trunk or limbs made her wince, and she said it gave her great pain. The mere mention of getting out of bed put her in a state of great agitation. When she had to be moved for the purpose of changing her clothes she cried out with pain, and though the attendant took the greatest care not to hurt her, she often complained of being injured on these occasions.

For a year before her death she suffered from frequent bronchitic and asthmatical attacks, and it was one of these that carried her off on 10th February, 1877.

The *post-mortem* examination was made on 12th February, at noon. Temperature of room, 48 degrees.

Nothing abnormal was detected in the head, except that the substance of the cerebellum was unusually soft and pulpy. The calvarium was thin; but all the bones of the skull were normal in consistence.

There was a considerable amount of fluid in both pleural cavities. The right lung was extensively adherent. Both lungs were flabby, œdematous, and non-crepitant; the right contained some tubercular deposit in the apex. The heart was loaded with fat externally. The muscular substance was pale and fatty-like. (On microscopic examination the muscular substance of the heart was found to be in a state of fatty degeneration.) The valves were normal.

The liver was fatty, and the gall-bladder packed with angular gall-stones. Spleen large, but normal in structure.

The kidneys, which were with difficulty removed from being deeply imbedded in fat, presented a most singular appearance, and in shape more resembled the pancreas; but indeed neither of them could be said to have had any definite form. The left was much smaller than the right, the respective weights being $3\frac{1}{2}$oz. and $5\frac{1}{4}$oz. (On microscopic examination the kidneys were found to be fatty.)

The uterus was large, and somewhat misshapen. There was a great quantity of fat beneath the skin and around the abdominal organs.

When examining the thorax it was observed that the ribs were almost destitute of earthy matter. They were pliant, and after bending to a certain degree, they snapped like a piece of thin cork. The fifth, sixth, seventh, eighth, and ninth ribs on the left side were bent at a double angle just as if they had been folded. This position was permanent, and there was no evidence whatever of fracture. The bones of the limbs were next examined, and it was found that the knife could be pushed easily through them. The long bones of both legs and arms broke across with ease. The bones of the spine and pelvis were found to be in the same state of softness, cutting as easily as cheese.

Weights of Organs.

Encephalon	44½ oz.
Cerebellum, &c....	5¾ ,,
Heart	11½ ,,
Right lung	15¾ ,,
Left ditto	11½ ,,
Liver	41¾ ,,
Spleen	8¾ ,,
Right kidney	5¼ ,,
Left ditto	3½ ,,

The family history of this case is of interest. The tendency to constipation was always marked during the maniacal attacks. The same condition existed in the brother's case, and he died from ulceration of the stomach. A younger sister, who was admitted into the asylum in September, 1874, had it to a still more marked degree. During four and a half years her bowels never acted except after the administration of copious enemata. In May, 1879, she had a severe attack of pneumonia, from which she made a good recovery, and singularly enough since then her bowels have acted quite naturally.

The period of life at which insanity manifested itself in the three cases was—A. C., æt. 22; M. C., æt. 24; J. C., æt. 26. The tendency to self-mutilation has not yet shown itself in M. C., but it is remarkable that when J. C. gouged out her eyes in 1868 she was not aware that her brother A. C. did the same thing in 1854.

The mother was placed in the asylum in February, 1881, at the age of 78. She is demented, and has been epileptic for 12 years. After the fits she becomes excited. She has

no tendency to constipation. The father is a man of ordinary intelligence, and has enjoyed good health, though he has always been intemperate.

The osteomalacia in J. C. probably commenced shortly after the attack of pleurisy in 1869; at all events, the symptoms were well marked in 1872. Although the pain and hyperæsthesia were remarkable, the existence of mollities ossium was not detected or suspected during life, and as she lay constantly in bed, there was no deformity of the limbs or trunk.

Extreme wasting of the fatty tissue has been generally observed in osteomalacia. In this case, however, the deposit of fat in all parts of the body was quite unusual. It will be noted that the only part of the osseous system which did not present degeneration was the skull.

The subjoined table given by Erichsen shows the relative frequency of softening in the various bones as observed in 131 cases:—

	85 Child-bearing Women.		46 other Cases.	
Pelvis	... 96	per cent.	... 87	per cent.
Spinal column	54	„	... 87	„
Chest	... 31	„	... 80	„
Upper limb	... 12	„	... 62	„
Lower limb	... 17	„	... 78	„
Head	... 8	„	... 52	„

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*Case of Artificial Feeding, with Suggestions for Apparatus.** By Henry Sutherland, M.D., Lecturer on Insanity, &c., at the Westminster Hospital, Visiting Physician to Blacklands House and Otto House Asylums.

The patient was fed 148 times, with both the mouth and nasal tube, from the 20th of April, 1881, till the 2nd of November, 1881, a period of six months.

Mr. J. B., æt. 30, admitted to Blacklands House Asylum, on the 29th of March, 1881.

History.—No hereditary tendencies. First attack. (?)

Form.—Melancholia with suspicion, alternating with stages of dementia.

Stout and very strong but pale from refusal of food.

* Read at the Quarterly Meeting of the Association at Bethlem Hospital, Jan. 31, 1882.

Delusions.—That his mother has tried to poison him. That he is watched. That he is attacked by a mob. That he can smell people being boiled.

Chest healthy. Bowels confined. Appetite bad. Pulse 110, weak. Urine loaded with phosphates. No bruises. Nails bitten to the quick.

Answers questions reluctantly. Sometimes refuses to speak at all. Says he wants to walk round the clubs instead of going to bed. Sleeps badly.

April 4th.—Five days after admission. Fed by myself with the mouth tube and gruel, for first time since admission, at midday, but made an excellent supper that night.

May 6th.—Attempted suicide by strangling himself with his sheet. Ordered thick rug and strong suit.

20th.—Another attempt by biting through the skin over the radial artery. Is closely watched day and night.

23rd.—Refuses to pass water. Catheter passed. Fed twice with tube. Refuses to allow bowels to act. Injection. In fact, attacked at all orifices.

May 28th.—Fed with nasal tube, the resistance to the mouth tube being so great as to endanger the patient's life.

Catheter, also injection.

July 8th.—Persuaded to take food by allowing him to steal it, as he supposed, from another patient. Acts always in contrary direction to orders, like a pig pulled by tail. Told not to go to bed, he goes at once; not to put out tongue, puts it out at once; not to go in garden, goes at once; not to pass water, and he does so at once, and so on.

Aug. 3rd.—New delusions, but clearer in mind.

Passed fæces and water on floor of padded room. Filthy in his habits. Masturbates.

Oct. 29th.—Tried to strangle himself with his braces.

Nov. 6th.—Removed to Bethlem, not improved.

I am indebted to my friend and colleague Mr. E. T. Hall for the above notes. The aspect of the case varied much day by day, the patient sometimes appearing to be in the lowest state of dementia, at others clearing up and enjoying a game at billiards, and conversing freely with those around him.

He had the strongest jaw I ever encountered in a case of artificial feeding. I used my own gag, made by Messrs. Maw, of Aldersgate Street, which is like the ordinary screw gag for the mouth, but has the prongs turned, the one up and the other down, so as to hook round the gums, thus preventing the gag coming out of the mouth should the patient twist his head round during the process of feeding. This form of prong is also shorter than are those of the gag

generally used, so that the ends of the prongs do not project and stand across the entrance to the œsophagus, as is too often the case with the ordinary gag.

My fingers were sometimes quite stiff and sore from the efforts to open the patient's mouth.

He soon, moreover, began to learn and put in practice all sorts of artifices to make the feeding process as difficult and disagreeable as possible. He would bellow like a bull at each breath as the tube was being passed, which of course made me think I was hurting him. It was merely done, however, to annoy. He had the strongest and most muscular tongue I ever had to overcome by the tube. He could twist it in such a manner as to make the tube go upwards, sideways or into the larynx, or any way but the right one.

The most troublesome symptom to overcome was an excess of greasy saliva which he appeared to be able to produce at will from all the glands of the mouth. This secretion was so copious that if I pressed the tube with my forefinger on the tongue, it would slip round and round, from right to left, and I was unable to guide it into the œsophagus. The only method on these occasions was to withdraw the tube and scoop out as much as possible of the saliva from the mouth with a towel, and then recommence the feeding process.

I purpose applying to some instrument maker shortly for a tube which I intend to be made flat; that is to say, it is to have the section oval instead of round, about the same size and shape as the forefinger of a man. This, I believe, would lie flat on the tongue, and be less liable to slip than a tube the section of which is a circle.

On some occasions the tube passed more easily than on others. Mr. Hall found that this was frequently due to the position of the patient's head. If the head is bent forward whilst the tube is being passed, it will go down more easily. But again, if the head is too forward, then the food is poured into the funnel, and when it is being swallowed the patient can all the more easily bring it up. For this patient had the power of vomiting partially at will, and although the best part of the food generally kept down, I never remember feeding him without a certain amount of sickness following the injection of the fluid. Less vomiting occurred with the nasal than with the mouth tube.

Being somewhat tired of the constant battle which ensued whenever the patient was fed by the mouth, and being nearly

stunned by the noise the patient made during my endeavours to preserve his life, I resolved to try the nasal tube.

I used a long piece of catheter tubing, about quarter of an inch in diameter, sometimes armed with a wooden tip, sometimes not. This tube was about 20 inches in length, and had a mark on it 14 inches from the end passed down the nose to show me when to stop. The other end had the indiarubber piece of tubing connected with a Higginson's syringe attached to it. And the other tube from the bulb of the syringe was placed in the jug of liquid food. This apparatus was arranged for me by Messrs. Weiss.

No difficulty was at first entertained in passing the tube, but later the tube became more limp, as the weather was then extremely hot, and the patient also became more clever, so that more than once I caught him passing his tongue back, bringing the tube from the posterior nares with the tongue to between the teeth, and had it not been for my being constantly on the look-out for this old trick, the tube would have been bitten off, and a piece of it left in the œsophagus.

The lesson to be learned from this was, that nasal tubes are but perishable, and that if we are to use them, they must be constantly renewed. They may be immersed in cold water for a short time during the very hot weather, but are best kept on a cooling-dish, dry, in a cold cellar. But of course they must not be too hard, which may result from over-cooling. They should always be well oiled before use.

I am indebted, as I said before, to Mr. Hall, superintendent of my asylum, for his careful notes on what I may fairly call a most interesting, although most trying case.

Two Cases of Insanity associated with Chorea.—By Joseph Wiglesworth, M.D. Lond., Assist. Med. Officer Rainhill Asylum, Lancashire.

The following two cases of so-called "Rheumatic Insanity" have recently been under observation in Rainhill Asylum, and I am indebted to Dr. Rogers, under whose care the patients were, for permission to publish an account of them.

Mary H., æt. 21 years. Married. Admitted Dec. 29, 1880. There was nothing of importance in the family history: her parents were living, and also five brothers; a sister had died young. She herself had been married three years, had had one child, and one miscarriage about