dences of poisoned frame are too manifest. So long as they are physically capable of pursuing their vocation as their adopted means of livelihood, they are often compelled to be regardless of the existence of disease which is contagious, and so is multiplied *ad infinitum* the terrible scourge with which our profession is unhappily too familiar. The beneficent Act passed a few years ago by a wise and humane legislature is now sought to be repealed on moral pretexts. The outcast wanderer is encouraged to defy the law, to protect the *liberty* of her poor diseased body, and to reject the means of relief and cure, and a way opened to her of escape from her degraded and pitiable life. Certain members of the legislature have leagued themselves against the Act; and one distinguished member of the late administration has pledged his future life to its repeal. Even among our own profession there are some who are not satisfied with the Act. If the system of certificate be an inducement to immoral indulgence, surely this can be amended; and, in my judgment, opponents are bound in humanity to provide a satisfactory substitute before they inflict on the nation so terrible a calamity as the loss of the present Act. The British Medical Association, through its multiplied branches and its intelligent press, offers an excellent vehicle for collecting the medical opinion of the country on this most important subject.

In fulfilment of his foreshadowed intentions, our distinguished Premier has grappled with the Sanitary Acts. If within reasonable time he can bring them from chaos to order, and enact supplementary laws founded on our combined professional knowledge, and make them applicable to the entire kingdom, and compulsory instead of permissive, he will deserve a civic crown.

The medico-legal relations of insanity, the boundary lines of responsibility and non-responsibility for crimes committed under conditions of assumed mental disease, involve questions of grave import, and challenge the intelligence and soundness of our jurisprudence. A conference between distinguished members of the law, and of medicine (as suggested by Dr. Russell Reynolds), might lead to satisfactory results. We want a "forensic medical officer" whose professional training shall comprehend psychology, and all that may prepare him to analyse the ever-varying phases of mental aberration, to detect the crafty malingeringer, and to assist the judge in determining the *degree of responsibility involved in the act of imputed criminality*. And who so fitted as he? For such knowledge is special, and comes by patient labour, and not by intuition, as some have presumptuously asserted. The illustrious Casper, by his genius, energy, and unrivalled experience, contributed largely to establish a criminal code in Prussia, a model of wisdom and humanity; and secured for his country an enviable distinction, and for himself undying fame. I have ventured to make a brief allusion to some among many subjects which have engaged professional interest, and which well deserve the serious consideration of our great Association. I heartily commend it now to your increased favour and support, and earnestly pray that its councils may be inspired with wisdom to guide and direct its united intelligence to the advancement of science, the honour of our profession, and the good of mankind.

THE CASE OF THE LATE PROFESSOR HUGHES BENNETT.

By W. CADGE, F.R.C.S., Surgeon to the Norfolk and Norwich Hospital.

PROFESSOR J. HUGHES BENNETT died at Norwich on September 25th, 1875, aged 63.

A narrative of his illness, so far as it is known to me, particularly of the last complication which led to his death, will have a sad interest for those who knew and loved him as a friend or teacher; and a deep professional, as well as a sad, interest for those, and they have been many,* who, from time to time, have used their best skill and thought to detect and unfold the hidden cause of his mysterious case. I know not exactly when or how Dr. Bennett's first failure of health commenced; but it was many years ago. The most prominent and persistent of his early symptoms were those of a bronchitic and laryngeal affection, which were sometimes urgently alarming, sometimes almost recovered from, were readily reproduced, and did frequently recur up to the very last.

By slow degrees, his general health failed, he grew thinner, looked pale, and lost strength. A few years ago, it was discovered that he had diabetes; but this disappeared without any great rigour of treatment, and has not been thought or known to have recurred, except

occasionally and very slightly. On this point, however, there may be room for doubt. Since the first discovery and the first disappearance of the sugar, I have reason to believe that examinations of the urine have not been frequently made. In conversations and in answers to questions on this subject, Dr. Bennett always spoke of the diabetes as a thing of the past, and as not bearing with importance, or as having much influence, on his steady deterioration of health; at no time had he thirst or diuresis; and, therefore, the malady did not impress itself on his thoughts by the usual general symptoms. Very recently, however (in August), sugar was again found; and I have before me a paper containing observations on the urine made three times daily during the first half of September 1875; from which it is shown that, while the specific gravity and the quantity of the urine were but little, if at all, above the natural standard, sugar appeared and disappeared in a quite irregular and intermitting way. Thus, the urine passed during the night gave a dense deposit, with Fehling's test, on five out of fourteen days; that passed at mid-day on six, and that passed in the evening on four out of fourteen days; while in all the other observations, no sugar was found. During this period, his diet was very similar from day to day; consisting of fish, a little meat, pudding or tart, fruit and sherry; very little bread, and no potatoes.

If, as I have said, in this long interval between the first and last clear recognition of diabetes, the urine was but seldom examined, and, when examined, chanced to be free from sugar, it seems probable that glycosuria, in one of its intermittent and milder forms, existed throughout, and was the true and chief cause of the emaciation and debility which, on any other hypothesis, it has been found so difficult to explain.

Be that as it may, his health continued to decline. The last three winters he passed in the south of France, with some benefit, possibly, to his bronchial and laryngeal affection, but apparently without any effect on his general state. For many years, Dr. Bennett had suffered from occasional attacks of gout; and he was liable, too, to lithic acid deposit in his urine; occasionally, for several years, he had experienced some slight impediment and irritation in making water, which he thought to be due either to slight stricture or to prostatic enlargement. From time to time, a simple catheter was passed, but no stricture was discovered. Last winter, at Nice, he had rather more vesical irritation than usual. On his way to England, in June, he stayed for a time on the borders of the Lake of Geneva; and a letter I received from him on July 1st will best describe his condition.

"I have long been intending to write to you in consequence of a malady which has been creeping upon me for some years, but which now is causing me no small anxiety. Frequent micturition; pain in the back, long thought to be lumbago, but which I now know to be renal; sediments of uric acid, and attacks of acute gout in the right foot, and one in the stomach, have indicated, during the last, say four years, pretty clearly the general diathesis and approaching local disorder. About three months ago, at Nice, I was suddenly seized with pain during micturition, extending to the extremity of the urethra, and passed about a tablespoonful of bloody urine, mixed with gravel. The bladder was irritable for about twelve hours. Lying in bed, poultices, and some alkaline water, got rid of it. Since coming here, four weeks ago, I have been sensible of dull pain in the perinæum; had two more attacks of irritable bladder, passage of blood, etc. Whether all this signifies irritable bladder, prostatic or renal disease, or stone, I cannot tell. Can you suggest what should be done? I have given up wine, beer, acids, fruit, and sugar; take a good deal of milk, little meat; indeed, the desire for animal food is small. I continue pale, weak, and emaciated; I apply poultices to relieve local pain, and take about twenty grains of bicarbonate of potash thrice daily, in the slightly alkaline waters of this place; I also take fifteen drops of vin. sem. colch. every other night or so. It may be only gout, but I dread stone. My urethra is very irritable; and, the last time a catheter was passed, I nearly fainted. This was two years ago; and I was then assured that there was no stricture or prostatic disease, merely a weak bladder."

In July, he came to Norwich, looking more emaciated, pale, and ill than I had ever seen him. On carefully sounding, a stone was readily felt, apparently of some size; the bladder was capacious and healthy, and could retain nearly half a pint of urine; the prostate was slightly enlarged; the urethra very sensitive and irritable; the urine was clear, acid, specific gravity 1.020, and contained no albumen. He was much depressed by the knowledge that he had stone, but his innate force of character came to his aid; he looked the difficulty in the face, and was prepared at once to undergo treatment. It was not without difficulty that I induced him to go to Edinburgh in the first week of August; there were many reasons which made a visit there desirable; travelling did not add much to his troubles; and I confess that I was not without the hope that, once there, he would be persuaded to ask, and would

* As I am unable to give, with accuracy, the views, so I have purposely avoided using the names of any of the physicians and surgeons who have at any time been consulted by Dr. Bennett.

see the wisdom of accepting, the aid of one of his distinguished colleagues and friends. While there, he received much comforting and valuable advice and encouragement, but his symptoms increased in severity. He wrote on August 18th: "There is now much more irritation than when I last saw you; stooping and turning cause sharp pangs, and the close of micturition is very torturing." He returned to Norwich; and the question of operation, lithotomy or lithotripsy, presented itself. Either must be attended with the greatest hazard in one so worn and unhealthy; but the thought of doing without operation was simply intolerable, and not to be considered. In favour of lithotripsy, were the fair quietude and healthy condition of the bladder and urine; but there were serious drawbacks. Dr. Bennett was a man of high spirit and courage; but his courage fitted him rather to encounter one great risk than to endure the wear and tear of repeated operations, frequent use of instruments, and the probability (made more probable by the presence of glycosuria) of troublesome cystitis. The size of the stone alone could decide the point; and, to ascertain this, Mr. Clover kindly came down and administered nitrous oxide, followed by ether; while, with the lithotrite, I found that the stone measured $1\frac{1}{2}$ inches by 1 inch. Such a stone as this was fairly within the compass of lithotripsy in an otherwise favourable patient; but, in this case, I had not a moment's doubt that lithotomy, if carefully and accurately done, notwithstanding its greater immediate risk, afforded the best chance of complete recovery. In this view, the patient readily acquiesced; and, on the following day, September 16th, I removed the stone by lateral lithotomy, assisted by Mr. Crosse, Dr. Beverley, and Mr. Hooker. The nitrous oxide and ether was again used by Mr. Clover, with admirable effect; there was never a movement of the patient, nor the least headache or sickness afterwards. The operation was easy and satisfactory. The transverse artery of the perinæum was large, and spurted freely; it was easily tied when the stone was removed; the blood was so thin, and so little disposed to coagulate, that every little vessel continued to ooze; and I deemed it best to plug the wound round a silver tube, rather than allow any quantity of blood to be lost. The stone was composed of lithic acid; it measured $1\frac{1}{2}$ by 1 inch, and weighed 193 grains. No more blood was lost, and urine passed freely afterwards. He suffered considerable aching pain in the wound for some hours; but it was gradually checked by half a grain of morphia introduced into the rectum at the time of operation, and twenty drops of Battley by the mouth two hours after. At night, he turned cautiously on one side, took twenty grains of chloral, and had some hours' sleep. Pulse 90.

September 17th. Urine plentiful; he had pain only when he moved. Pulse 96; temperature 102 deg. Tongue dry but clean. He had taken egg and milk and a few teaspoonful of brandy in soda-water; he had frequent cough and expectoration, which caused temporary pain in the wound.

September 18th. The tube and part of the plug was removed; after which the bladder was able to retain urine and empty itself by the wound every two hours. This caused considerable pain in the parts from smarting and spasm; but in a day or two, when all the lint was removed, it abated, but never wholly ceased. Pulse 92; temperature 101 deg.

I need not record minutely the daily progress of the case. Suffice it to say, that for four or five days there was a good prospect of speedy recovery; he took food plentifully, and was in good spirits; and everything went on well so far as concerned the pelvis and bladder; the urine was easily caught and was clear, but loaded with sugar, with a specific gravity of 1030 to 1035. By degrees, however, the cough and expectoration became more frequent; and this, with the frequent spasm and larger amount of urine secreted, distressed him and prevented sleep. Opiates by the mouth or bowel relieved for the time, but were apt to be followed by sickness; chloral did not act well, and signs of increasing debility showed themselves. The pulse continued from 90 to 96, but became weaker and weaker. Aphthous patches gathered on the tongue and throat, and made swallowing difficult, and thus the prostration went on; and death from sheer exhaustion took place on the 25th, the tenth day after the operation.

Post mortem examination, forty-eight hours after death. The body was emaciated; the surface pale and bloodless. The blood was thin, and transuded through the vessels and stained the tissues. Only one small clot in the right ventricle of the heart was met with.—The bladder was perfectly healthy; its muscular walls were rather thin and dilated; its mucous membrane was pale and smooth.—The prostate gland was enlarged to the size of a small apple; it projected somewhat like a cornice into the bladder, and on this projecting part there were traces of slight ecchymosis beneath the mucous membrane. The lithotomy wound was clean, and so slight that, looking from the bladder, none could be seen, and on closer scrutiny it was found that the knife had only divided the mucous membrane and had scarcely reached the left lobe—this, doubtless explains the power of

the bladder to retain urine the moment after the tube was removed.—The kidneys were slightly congested, but not unhealthy.—The liver weighed 4 lbs. 5 oz., and was healthy.—The spleen was greatly hypertrophied, and weighed 2 lbs. 12 oz.; texture firm, of natural colour and appearance.—The stomach and intestines were healthy.—The heart was large and flabby, and weighed 1 lb. 1 oz.; its valves were healthy; the left ventricle was empty; the right contained a soft clot; the aorta was deeply stained by the colouring matter of the blood; its walls were atheromatous, and there were several calcareous scales.—The lungs were emphysematous and oedematous; there was some dilatation of the small bronchi; at the apices there were some small patches of collapsed lung-tissue; no tubercle; the right lung weighed $1\frac{3}{4}$ lbs.; the left, $1\frac{1}{2}$ lbs. There were some old pleural adhesions on the right side.—The trachea and larynx were pale and healthy.—*Head.* On raising the calvarium, a soft tumour was discovered situated on the right side of the head, about an inch above the ear, between the dura mater and the bone. It was about the size of a hen's egg, and projected towards the brain, so as to produce a deep pit or hollow into which it fitted. The convolutions were flattened and pressed down, but not otherwise altered; no softening; no congestion. The dura mater covering the tumour was somewhat thickened. The parietal bone was thickened and hypertrophied around the circumference of the tumour; over it, there was thinning by pressure and absorption, and at one point, about the size of a shilling, all trace of bone had disappeared, and it was replaced by fibrous membrane. The tumour had a cystoid character, with a distinct investing membrane, and its contents consisted of a blackish pulpy material resembling the interior of a recent aneurism, or more closely of a myeloid tumour. Under the microscope, there were seen cells of various descriptions, plates of cholesterine, fatty granules, and altered blood-corpuscles.—The brain itself was anæmic, but not, on the whole, unhealthy; it weighed 47 oz. The optic thalami, corpora striata, pons Varolii, and medulla oblongata had a somewhat shrunken atrophied appearance, and were, perhaps, harder and tougher than usual. The arteries were healthy, and, to the naked eye, the texture of the brain around them seemed natural. I will make no comment further than to say that, so far as I have been able to ascertain, Dr. Bennett never suffered from headache, giddiness, or any symptom directly indicative of such a lesion as that just described.

I may add, that Professor Sanders of Edinburgh, who happened to be staying in Norwich, visited Dr. Bennett a day or two before he died, and was present and kindly assisted at the *post mortem* examination.

TWO CASES OF MICROCEPHALIC IDIOCY.*

By G. E. SHUTTLEWORTH, M.D.,

Medical Superintendent of the Royal Albert Asylum, Lancaster.

A BRIEF description of two microcephalic idiots, whose head-measurements are extremely small in proportion to the amount of intelligence they evince, may possibly be of some interest to the members of the Psychological Section of this Association. Both are at present resident in the Royal Albert Asylum, Lancaster; and although a short notice of the first case, quoted from a description by Dr. Ireland, who casually saw it in 1871, appears in the last edition of Bucknill and Tuke, I may, perhaps, be allowed to give a few additional particulars, both for the sake of comparison with the second case, and also on account of certain alterations in the physical and mental characteristics of the patient, which have occurred during the last four years.

CASE I.—Frederick — is now eleven years of age, and has been under my observation in the Royal Albert Asylum during the last four years. He is a well-knit, straight-limbed boy, $46\frac{3}{4}$ inches high, weighing 47 lbs.; and, in spite of the peculiar conformation of his head, has a fairly intelligent expression, with large lustrous eye. The following are his head-measurements as given in Bucknill and Tuke, upon the authority of Dr. Ireland's observation in 1871, and, also, as recently taken by myself:

	1871.	1875.	Diff.
Circumference	$14\frac{1}{8}$ in.	$14\frac{1}{8}$ in.	$\frac{3}{8}$ in.
From root of nose to spine of occiput (tape) ...	$7\frac{7}{8}$	$8\frac{1}{2}$	$\frac{5}{8}$ in.
Ditto calliper measure	—	$4\frac{1}{3}$	—
From ear to ear over vertex (tape)	$9\frac{7}{8}$	10	$\frac{1}{8}$ in.
Ditto calliper measure	—	$3\frac{3}{4}$	—
From ear to middle of forehead	$4\frac{1}{8}$	$4\frac{1}{8}$	—
From ear to middle of occiput	4	$4\frac{1}{8}$	$\frac{1}{8}$ in.
The two measurements made, as I believe, by comparable methods,			

* Read before the Section of Psychology at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.