I found her in bed, complaining of headache. I took her temperature, and found it 100 deg. Fahr.; in the evening it was 99 deg.; the next morning it was again 100 deg., and in the evening had again fallen. I now felt sure that some amount of encephalitis was present, and told the mother so, giving her careful directions as to her attendance on the child. On visiting the child the next day, the mother informed me that "as her daughter got no better, she had called in Mr. ——, who said that there was nothing the matter with the brain, and that the symptoms were only hysterical". The child belonged to a sick society, and it was necessary for me to sign her weekly certificates. The first was brought to me for my signature, and had been filled up by the surgeon attending, and the disease was marked "hysteria". Before the end of the second week her death-certificate was brought to me, and the cause of death was given as "meningitis". I believe that in this case I should not have had so early a conviction that meningitis was commencing, had it not been for the high morning temperature; and since then, in similar cases, I make it a rule to observe both the morning and evening temperature before eliminating from my mind the possibility of the advent of encephalitis.

The following is the record of the morning and evening temperatures in a case of encephalitis in a boy aged 15.

	Morning.	*Evening.*
1st day	... 102.6 Fahr.	..... 101.8 Fahr.
2nd ,, ...	... 102.9 ,,	..... 100 ,,
3rd ,, ...	... 98.8 ,,	..... 98.4 ,,
4th ,, ...	... 99.2 ,,	..... 99 ,,
5th ,, ...	... 99.7 ,,	..... 99 ,,
6th ,, ...	... 99.8 ,,	..... 99.4 ,,
7th ,, ...	... 100.6 ,,	..... 99.1 ,,
8th ,, ...	... 100.4 ,,	..... 99.5 ,,
9th ,, ...	... 100.1 ,,	..... 99.2 ,,
10th ,, ...	... 99.8 ,,	..... 99.8 ,,
11th ,, ...	... 99.5 ,,	..... 99 ,,

From this period convalescence established.

I lay these slight notes before the profession, hoping that they may be confirmed by more numerous observations, and believing that the rule of temperature which I have so far found to exist in these cases will prove a valuable aid to diagnosis.

THE RELATION BETWEEN ARTERIAL TENSION AND ALBUMINURIA.

By F. A. MAHOMED, Esq.,
Resident Medical Officer to the London Fever Hospital.

I do not desire to enter into a controversy with Dr. Johnson on the much vexed question of "capillary power"; for, although he naturally adheres to his theory of the stopcock action of the arterioles, still I am not singular in believing in the existence of such a power; and Dr. Johnson must surely allow that the transudation of hæmoglobine, which is associated with high arterial tension, but absent in venous congestion, together with other facts brought forward in my paper and previous article, are strong proofs of its presence. They at least prove the occurrence of high pressure in the arterial capillaries; and he does not attempt to explain them otherwise, or to contradict them.

Dr. Johnson, however, not only mistakes my theory of the pathology of Bright's disease, but he lays down a rule and a challenge, to which I gladly respond. He says that "a true theory must be consistent with all ascertained facts"; and he then instances the high arterial pressure existing in cases of contracted kidney, and the small amount of albumen discoverable in the urine, as a condition that cannot be explained by my theory. Not only have I found my views to be "consistent with all ascertained facts", but I have solved by their assistance many problems which, when regarded from Dr. Johnson's point of view, are difficult of comprehension; such, for instance, as intermittent albuminuria, rupture of capillaries and appearance of blood in the urine, the immediate relief afforded by purgatives, the production of dropsy, and the transudation of hæmoglobine.

With regard to the slight degree of albuminuria accompanying contracted kidney, it may be explained as follows. The changes which precede and accompany cirrhosis of the kidney are peculiarly insidious in their commencement, gradual in their development, and prolonged in their existence. There is, therefore, at first a slight but gradually increasing want of relation between blood and tissue; this produces a correspondingly slight, but also gradually increasing, condition of high tension in the arterial system. This increase of tension is too slight and too gradual to produce an albuminuria; but it nevertheless, if allowed to continue and to increase, produces a thickening of the arterial walls, a hypertrophy of their muscular coats, and a hypertrophy of the heart. I believe it is this condition (when accompanied by a particularly active excretion by the skin or bowels, affording relief to the kidneys) that gives rise to those changes described by Sir William Gull and Dr. Sutton as "arterio-capillary fibrosis", and stated by them occasionally to exist without marked change in the structure of the kidney. When at last this very gradual increase of pressure, which may require years for its development, reaches that degree which, in an acute case with healthy vessels, would give rise to a copious transudation of albumen, the walls of the capillaries and arterioles are so thickened that it is far more difficult to force through the albumen. For the same reason, the hæmoglobine is absent from the urine of these patients, in whom the high arterial tension is invariably well marked, but whose urine may be free from albumen. In such cases, slight constipation or chill (by arrested excretion) will produce that temporary existence or increase of albuminuria which is so characteristic of cirrhosis; or a more severe constipation or chill will immediately give rise to the symptoms of the acute form of Bright's disease.

Again, Dr. Johnson states that he has been unable to discover any hypertrophy in the muscular walls of the arterioles of the lung, produced by the existence of high pressure from the passive engorgement of these organs; but, on the other hand, I have constantly seen thickening and endarteritis of the pulmonary vessels, demonstrated by Dr. Moxon as the result of "strain" from high pressure in these vessels, due to this cause.

Dr. Johnson considers a similar "unity of action" to exist between the heart and muscular arterioles, as between the detrusor urinæ and the sphincter vesicæ, or between the muscular walls of the rectum and the sphincter ani. I, however, am unable to perceive the resemblance for while, in the former case, according to Dr. Johnson, the heart and arteries are simultaneously contracting and acting in opposition, in the two latter instances, while the expulsors contract, the sphincters are relaxed, and *vice versâ*.

Finally, Dr. Johnson has entirely misapprehended my theory of the production of the pathological changes; he has omitted the most important step in the process. Given the predisposing condition of blood-poison and high tension, from capillary obstruction, I do not believe that any acute kidney-change would be produced without the occurrence of another most important condition—namely, arrested action of one of the excretory organs, either bowels or skin. This throws increased work on (and produces, therefore, congestion of) the kidney, and subsequent cell-proliferation—a somewhat different sequence of events from that described by Dr. Johnson as entailed by my theory.

THERAPEUTIC MEMORANDA.

ON VALERIANATE OF AMYL AND ON AMYL ETHER.

A short time ago, I mentioned in this Journal the merits of a new preparation of valerian, viz., a spirit of valerianic ether. Notwithstanding that this preparation is less disagreeable to patients, as testified by those who have taken both, than the ordinary valerianic preparations, it has its drawbacks, the principal one being the diffusion of the smell through the apartment or ward when a dose is being taken, or through a shop when it is being dispensed.

It occurred to me that possibly, the valerianates of amyl or methyl might be more elegant than the ethyl preparation. Messrs. Southall undertook to prepare them for me. The methyl one is not much superior to its predecessor, but the amyl one is incomparably more agreeable. A spirit of the valerianate of amyl, to which a few drops of a spirit of acetate of amyl (known in commerce as essence of Jargonelle pear), have been added, is, without any qualification or exception, not merely the most elegant known preparation of valerianic acid, but intrinsically an agreeable drug. All these spirits improve in odour by a little keeping. I find that, to some stomachs, ethers are repugnant unless well diluted; and six or eight drops of the compound spirit are, generally speaking, sufficient for an ounce of water, and also an adequate dose. I think that the effects of the amyl valerian are quite as good as those of the ethyl preparation. This latter will be called, in future, valerianate of ethyl, instead of valerianic ether. The new preparation will be called compound spirit of valerianate of amyl (sp. amyl valer. co.), and will consist of one part of ether to nineteen of spirit. To two ounces of this are added twenty minims of a spirit of acetate of amyl, made in like proportion, viz., one in twenty. The simple spirit will also be procurable.

I take this opportunity of saying that, by my direction, the oxide of

amyl or amylic ether has been prepared. This is a more agreeable preparation than the ordinary (ethyl) ether preparation of the *Pharmacopœia*. I have not yet had time to try its therapeutical effects, but should this equal those of the valuable old drug, this will be probably superseded. A spirit of amylic ether, to an ounce of which one drop of oil of gualtheria has been added, is a singularly fragrant and agreeable drug. Spirit of amyl ether, with a little acetate of amyl, is also very elegant.

W. F. WADE, F.R.C.P.,
Physician to the General Hospital, Birmingham.

SURGICAL MEMORANDA.

FISSURE OF THE ANUS IN A CHILD ONE YEAR AND A HALF OLD.

ON February 16th, 1874, I saw Nellie D., now one year and three-quarters old, a delicate small child, who had been dry-nursed since she was one month old. She had been inclined to be costive since infancy, but in May last the costiveness became aggravated, at which time I was consulted. The various ordinary means of regulating the bowels were had recourse to—aperients, diet, and enemata—but up to November 1873 no essential relief to the symptoms was afforded, and for some time past she never had a motion without aperients or enemata. She frequently went two or three days without relief to the bowels, and each act of defæcation was attended by violent pain, screaming, and crying. She would do all in her power to prevent the action of the bowels, writhing about and screwing her knees together. She was in great pain for an hour after each motion, and the discharges were costive and sometimes streaked with blood and mucus. In November, I attempted to examine the anus, but, from her restlessness, it was impossible to get a fair view of the part, though I fancied I could see a small crack on the verge. On November 27th, I put her under chloroform and discovered a small fissure, and through this I at once made a superficial incision. The relief was immediate and permanent. From the day of the operation, all the symptoms entirely vanished, and her bowels have acted regularly and easily ever since. It need hardly be added that her health has greatly improved since the operation. I put this case on record, both on account of its rarity, and, as I hope, of its importance. I am not aware of any similar recorded case, and no author that I know of alludes to fissure in children. Bryant describes it as a disease of adult life, and Curling as a disease of middle life; whilst Erichsen, Hilton, and Quain make no allusion to it in childhood. I am induced to hope that the case will prove important in reference to the treatment of constipation in children. Every one who has seen much of the diseases of children, must be aware of the difficulty which exists in the treatment of constipation, and have been baffled in dealing with it. It is not my intention to enter upon that subject; the object of this short communication being simply to draw attention to the existence of one cause hitherto overlooked, in the hope that relief may be afforded to, at least, a few of these troublesome and painful cases.

P.S.—I met my little patient with its mother a few days ago, and was informed that there had not been any difficulty with the bowels since the operation had been performed.

J. HYDE HOUGHTON, Surgeon to the Guest Hospital, Dudley.

PATHOLOGICAL MEMORANDA.

HÆMATOMA AURIS.

AS attention has recently been called in the pages of the BRITISH MEDICAL JOURNAL to the subject of hæmatoma auris, the following notes of a case which I have recently had under my care may not be inopportune as tending to prove the connection of hæmatoma auris with mischief in the brain or its membranes, in contradistinction to the theory that it is always caused by external violence.

A. B., an imbecile, was brought to me on March 16th, with a slight swelling of the auricle of the right ear, which his attendant had first noticed that morning. There was no redness or sign of bruising, and he complained of no pain (though perfectly able to do so if there had been any). On questioning the attendant, he assured me that there had been no violence (to his knowledge), nor had I any reason to doubt his word, as he is a perfectly trustworthy man, and has been here some time, and was much attached to his patient. On the 17th, the swelling was of the size of a large walnut; and on the 18th, was as big as a small orange. There was no increase in size after this date, but I could feel the false cartilage forming from day to day, and it was gradually subsiding, when, on May 20th, I was called up to him at five o'clock in the morning, and found him suffering from an apoplectiform seizure and in a semicomatose condition, in which state he lingered until the 24th, when he expired at noon. At the necropsy, forty-eight hours after death, I found the following morbid appearances. There was a thin layer of effused blood between the dura mater and arachnoid (chiefly, however, on the right side), which I traced to a spot in the right hemisphere laying over the petrous portion of the temporal bone, where there had been a lesion of one of the smaller cerebral vessels in the centre of a portion of brain which had undergone yellow softening, and the grey matter of the convolution in this spot was as tough as a piece of leather, and resisted the passage of the knife through it. The membranes were inflamed, and the dura mater was more than twice the proper thickness; and the superior longitudinal sinus was entirely obliterated, owing, I suppose, to some former inflammation of a chronic character, as there was history to account for it. There was an excessive amount of fluid in the dura mater. LEIGHTON KESTEVEN,
Assistant Medical Officer, Earlswood Asylum.

REPORTS
OF
MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

BIRMINGHAM GENERAL HOSPITAL.

A CASE ILLUSTRATING THE STATE OF MENTAL AUTOMATISM WHICH OCCURS IN EPILEPSY.

(Under the care of Dr. JAMES RUSSELL.)

THE following case affords a rather curious example of the state of automatism referred to in the valuable article on the Comparative Anatomy of Drunkenness in the JOURNAL of May 16th. I would also notice, in passing, the significance in relation to the hereditary transmission of tendency to drink afforded by that sentence in the article which notes the fact that the peculiar phase assumed by the "undisguising" of character which takes place in drunkenness will vary according as the character of the person reduced varies.

It is doubtless the case that, in that class of drinkers in which the habit has most of the nature of disease, the history of the family affords evidence of a proclivity to various forms of nervous disease, particularly to such as are of a hysterical or hypochondrial type; and that it is often the disease which induces the patient to drink. Yet in other families the same morbid history exists to as great an extent, but entirely uncombined with any cases of alcoholism. The difference doubtless consists in the underlying form of mental or moral constitution which is transmitted along with the unhealthy tendency, or is acquired through the influence of education.

The automatic phenomena of epilepsy are allied with the involuntary exclamations occasionally met with in chorea; still more with the utterance of habitual phrases by patients who have lost the faculty of intellectual language through disease in the left hemisphere of the brain. This subject has gained most interesting prominence in the hands of Dr. Hughlings Jackson. The epileptic phenomena, like the phrases just referred to, have sometimes the appearance of possessing a purposive character; such was strikingly the case in my patient. Several interesting examples are also given by Trousseau. But in reality these acts, like the phrases, have become habitual through frequent repetition, and have thus acquired almost a reflex character. It is worth while to notice the change which twice took place in my patient's symptoms under the influence of a mental impression, because it shows that the act of an epileptic during the paroxysm may not involve moral responsibility, but yet may be the direct result of an impression made upon the mind, or of an idea conceived during the period of sanity.

The patient is a boy thirteen years of age. His early fits were called hysterical by his mother. Those from which he suffers at present vary in character. When he was admitted, they generally consisted of very rapid dancing, in a fashion called "footing and heeling", the performer keeping on the same spot—a kind of step exceedingly common in our streets, and practised continually by our working boys. The steps were made with great rapidity, much more rapidly than he could accomplish when performing voluntarily under our direction. At the close of about three-quarters of a minute, he fell back in a state of general tonic spasm, lasting for about a minute; he then rose up, but generally fell