that it is common in mesenteric disease, in dyspepsia, and in hysteria; that it is increased by a slop diet; that it is worse at night than in the morning, and the like. In other words, experience teaches that flatulence indicates great want of vitality in the mucous membrane of the intestines; and it teaches that this cannot be cured by *exhausting* that organ still more by stimulating cathartics; that what is wanted is increased *power*, not increased action; and the former can only be obtained through the constitution generally. Experience leads one man to use aperients; another to eschew them, and give cod oil and other tonics.

Instances of a similar kind might readily be multiplied, to show how two individuals, each guided, as they suppose, by experience, may come to directly opposite conclusions, from the simple fact that one observer is contented with a *less amount of experience* than another. We prefer, however, to pass on to another important phase of our subject.

We have hitherto been contemplating the various scholars of experience, and how, in the same school, various readings are adopted of the same facts. Let us now inquire whether the teachings of Experience are always the same; whether she really does or does not give the *same lessons* to all her pupils. A question of more importance to the thoroughly enlightened physician it is almost impossible to put. It is a question which at the present moment is agitating the British medical world. The experience of our younger days, say Dr. Alison and Dr. Watson, is not the same as that of our mature years. True, replies Dr. Bennett; but it is only because you see things in a different light. Not so, say the former. Our memory carries us back to the time when diseases were characterised by an amount of power and vigour which we rarely meet with now; they resembled tropical diseases in their shortness and intensity, and our treatment had to be sharp and decisive; and certainly we may add, that it was successful in the widest sense of the term. We know, they add, that this type of disease has gradually changed; and with that change our practice has varied too. Our present plan of treatment, they urge, has been the result of actual change in the nature or type of disease, and not of change in our own theoretical views; and they farther add, that every physician, whose experience extends over many years, is well aware of the fact that stimulants are far more necessary in some epidemics than others of the same name, etc. The answer to this line of argument is ingenious, but apparently inconclusive. Without entering more closely upon the question, let us advert to a few considerations in favour of Drs. Alison and Watson's view. We know, as a general rule, that pneumonia is *now* of an asthenic type; but, every now and then, a single exceptional case is seen, where a large bleeding alone can give the patient a chance. We do not lay any stress upon this case, because it is an exceptional one; and we are right. But when we are told by the elders of the profession that what is now exceptional was in their day regular, and that what is now the rule was then the exception, surely we must conclude that Experience taught at one time a very different lesson to what she does now, and may do hereafter. Again, we may ask, does not experience teach very different lessons to the army surgeon, whose work is on the field of battle and amidst the strife of men, to what she teaches to the hospital surgeon, whose labours are exerted amidst more peaceful scenes; to the one, who only operates upon men whose constitutions are in first-rate condition; and to another, whose patients are in a far different state? Has the country doctor the same lesson presented to him as is put before his town brother? and does the experience of England suffice for the practitioner of India? and does the experience of one epidemic, say of scarlatina, make us perfectly prepared for the next?

The teaching of experience is equally uncertain respecting the action of medicines. At one time, the physician can cure the majority of his fever patients with quinine; at another, it seems to act as a poison. Dr. Addison, I think, cured, as he thought, twenty cases in succession of Asiatic cholera by sulphuric acid; but his next twenty all died. Dr. G. Johnson cured a large proportion by castor oil; a drug which in the hands of others proved positively harmful. Calomel affords us a still better illustration. Dr. Eyre, of Hull, introduced this as a cure and preventive for cholera. It was adopted in a great number of places; and, amongst others, in Liverpool, where I was enabled, by the careful reports of friends, to ascertain that its administration was generally attended with the happiest results. Yet at that same time, in a large London society, it was stated that not one single instance was known in the metropolis where even the smallest benefit had followed the

use of the drug. As the authorities on both sides were competent observers, what other conclusion can we come to than that experience taught those in London a different lesson to what she taught here? Liquor arsenicalis was originally introduced for the cure of ague; yet I have never found it do good; and ipecacuanha had once an equally good character in dysentery, a disease in which it is never used now. Take still farther the example of lime-juice, originally introduced by Dr. G. O. Rees some years ago for the cure of acute rheumatism, a disease for which he still prescribes it. In my own practice, I have only once seen prejudicial effects follow its administration, and only once have been disappointed in my anticipations of its influence upon the disease; nevertheless, other observers equally competent with myself have lost all faith in its curative powers. Are the opposing pupils of experience under these circumstances to contend against each other, under the idea that one alone can be right? or must we allow that the school-master which we all reverence is not uniformly consistent.

For my own part, I feel compelled to come to the conclusion that experience is not unvarying in its teachings; and, to speak tautologically, that the greater *experience* we have of *experience*, the less we can place implicit reliance upon it. We have thus attempted to show—

1. That individuals do not habitually set that value on extended experience that proverbial philosophy should induce them to do.
2. That to understand the full value of the experience of others, it is necessary to be habitually gaining it for oneself.
3. That independence of mind is as essential to the growth of personal experience, as undue deference to authorities is prejudicial to it.
4. That the difference between the practical man and the theoretical consists in the endeavour made by the latter, to have a more extended basis of experience than the former is contented with.
5. That false experience has hitherto been the bane of medical science.
6. That experience misleads us by being insufficiently extensive; by being based upon false premises; by signs being misinterpreted, and the like.
7. That we are liable to error if we consider the teaching of experience as invariable, and certain.
8. That there is reason to believe that there are circumstances modifying the nature of diseases and the action of remedies, with which we are at present unacquainted.

The natural result of all this must be, that no one can feel that he has ever attained the *ne plus ultra* in medicine. A learner at his entrance into life, the physician must continue so till death. Every step he takes must be weighed as cautiously as the elephant tries the strength of the plank which is placed as a bridge for him to pass over. Professors may teach, and observers may experiment with the most brilliant success, yet in the next generation their conclusions may be overthrown. But of one thing, we may feel certain, that where there are so many earnest minded individuals at work testing the true value of past theories, and cautiously framing new ones, medicine will ultimately attain as great a certainty as it is possible in the nature of things for her to do. Let us ever remember that the proverb is—*experience teaches*, not *experience has taught*; and we may then each of us add our *quota* towards that desirable consummation.

RUPTURE OF AN OVARIAN CYST: RECOVERY.

By G. GODDARD ROGERS, M.D., Medical Registrar to
St. George's Hospital.

IN the JOURNAL of October 23rd, Dr. Charles Farrar calls attention to a case of accidental rupture of an ovarian cyst. I am able to comply with his request, and to furnish two accounts of similar cases. One, which is detailed below, happened in private practice some years since; the other will be found in the section of the JOURNAL devoted to hospital records, and occurred recently in St. George's Hospital.

The patient, Miss K., was for some time under the care of my late grandfather, but had been absent from his neighbourhood for a long period, when the accidental cure of her complaint was brought about. Amongst various letters and papers, I find a communication from the medical gentleman then in attendance, relating the circumstances to my grandfather.

"Miss K.", he says, "first consulted me in February 1824. There was enlargement of the right side of the abdomen, and, twelve months before, she had experienced pain and heat in the situation of the ovary, followed by gradually increasing fulness; but, until the enlargement was so great as to excite remark, she had taken very little notice of it. At this period, her general health was not good, and I therefore adopted no treatment directed especially to the seat of disease. After a time, her health having improved, and the enlargement continuing to increase, the opinion of my late friend Dr. T—— was taken. He suggested the use of active purgatives and diuretics, the result of which was emaciation and failure of the general health, without any effect on the disease. The enlargement was now so considerable that the friends were anxious for the operation of tapping to be performed. I dissuaded them from it, and recommended them to consult Sir Charles Clarke, who agreed with me. From this time to September 1830, no further treatment was adopted beyond occasional constitutional treatment, the swelling slowly increasing. About the 20th of September, while in the act of descending the stairs, she fell, and struck the abdomen with considerable force. She felt no immediate inconvenience from this, but shortly afterwards experienced a strange sensation in the abdomen, with frequent inclination to make water. More than a gallon was passed in the twenty-four hours. No treatment was employed; the increased secretion of urine continued; and, in about ten days, the swellings had disappeared. Rapid emaciation then supervened, and she became exceedingly weak; and for some time it was doubtful whether she would not sink under the enormous drain from the kidneys. Under tonic treatment, however, she gradually recovered. In 1834, there was a slight return of heat and tenderness, with some fulness, in the old seat of the disease, which was quickly subdued by antiphlogistic remedies; and she has since remained quite well."

I may state that the patient subsequently married, and has several children. My father has frequently attended her, but never for any return of the ovarian disease. At present she is the hard-working wife of one of our Indian missionaries, and, from all accounts, appears to be in perfect health. It seems scarcely probable that the kidneys could have been the medium for absorbing so vast a quantity of fluid; and I am inclined to regard the case as one of rupture directly, or by the intervention of some infundibuliform band, into the bladder itself. The contrast between this termination and that of the woman lately a patient in our Hospital confirms the truth of Dr. Farrar's remarks on malignant affections of the ovary.

24, George Street, Hanover Square, November 8th, 1853.

THE USE OF ERGOT OF RYE IN PARTURITION: WITH AN INQUIRY INTO ITS SUPPOSED INJURIOUS INFLUENCE ON FETAL LIFE.

By H. LLEWELLYN WILLIAMS, M.D., late Physician to the
Beverley Dispensary and Maternity Charity,
St. Leonard's-on-Sea.

[Read before the East Sussex Medico-Chirurgical Society, Nov. 2nd, 1858.]

THE subject I have proposed for our consideration on this occasion is one of considerable importance, not so much on account of its novelty as to the interest attached to the determination of the actual value of a remedy admitted to possess many claims upon the attention of the profession.

It is not a little singular that ergot of rye, as a medicinal agent, was known to ignorant pretenders for many years before it was acknowledged as possessing any specific properties; and, before entering on the special object of this paper, I may be excused for alluding to what is known of its earlier history.

Ergota, or ergot of rye, as is now well known, is an undetermined fungus, with the degenerated seed of *Secale cereale*; and, according to the late Dr. Royle, the ergot employed in medicine is the grain of the rye stimulated into diseased action by the presence of the sporidia or spores of a fungus. This diseased action is not confined to the rye, but is met with amongst many other grasses, damp situations and moist warm seasons favouring its development.

Ergot of rye, or spurred rye, as it is also called, from its shape somewhat resembling the spur of a cock, is cylindrical in form, tapering towards both extremities, varying in length from half an inch to an inch, and from two to three lines in

diameter; whilst two furrows run along its whole length, often terminating at its apex by a greyish projection. Externally, it is purplish in colour; internally, grey, with a tinge of red. It is possessed of a peculiar musty smell, whilst its taste is slightly bitter and acrid; it is brittle, and, when dry, can easily be reduced to powder. It readily attracts moisture on exposure to the air, swells, and becomes mouldy, in which state it is liable to be attacked by a small insect, a species of *acarus*, which eats up the interior, and leaves the grain a mere husk, unfit for medicinal purposes: hence the necessity for its being kept in well-stoppered bottles.

At the conclusion of this short sketch of the natural history of this drug, I have now to request your attention for a brief period to the chemical composition of ergot of rye, as on a correct knowledge of this the elimination of the poisonous properties possessed by it must depend.

The analysis I have made use of is that of Dr. Wright, published in the *Edinburgh Monthly Medical Journal* for July 1840; which shows the component parts of this drug to consist of 31 per cent. of a thick white oil, 5.50 of osmazone, 9 of mucilage, 7 of gluten, 11.40 of fungin, 26 of fecula, 3.50 of colouring matter, and 3.10 of salts. The fixed oil contained in it is the principle on which Dr. Wright, in the paper already referred to, alleges that its active properties depend: this is of a bright brown colour, lighter than water, soluble in alcohol, ether, volatile oils, and caustic alkalies, and is readily separated from its powder by ether and subsequent evaporation. Its effect on the human body is to depress the heart's action. Ergot has also been subjected to analysis by M. Bonjean, a celebrated French chemist; the result of his investigations leads to the conclusion that, in reality, ergot possesses two active principles—1, an essential oil, highly poisonous; and 2, an aqueous extract, brown, of a thick consistence and musty smell, and which he has found possesses very decided anti-hæmorrhagic and obstetrical properties. To this extractive principle he has given the name of *ergotin*.

It is not a little remarkable that, like several other valuable medicines, the knowledge of this drug was, for upwards of a century, confined entirely to its poisonous qualities; and, according to Ramsbotham, the first intimation we have of its employment as an uterine remedy is not until the year 1774, when Parmentier, in a letter to the Abbé Rosier, published in the fourth volume of the *Journal de Physique*, made it known as a remedy often used in childbed by a certain Madame Depille, a midwife of Chamont. The credit of first taking it out of the hands of the women is due to M. Desgranges, an obstetrical practitioner who flourished at Lyons about the year 1777. Having published the results of his practice, the American physicians speedily adopted its use, and with marked success; but it was not until several years later, viz., in 1820, that it came prominently before the profession in this country, in a fresh edition of Dr. Merriman's *Synopsis* published in that year. Its actions and uses are now so well understood that it would be superfluous for me to occupy your time in enumerating them.

Like many other important remedies, in the first introduction of ergot into English practice, the accounts of the virtues it was said to possess were received with much distrust; and it was not until a mass of evidence had been accumulated on the subject, that the majority were obliged to acknowledge that it did indeed possess a specific uterine action, manifesting itself entirely through the nervous system, and not necessarily interfering with the circulation in any degree, though Dr. Wright states that it has often been known to diminish the frequency of the pulse. This probably was owing to the preparation employed being strongly impregnated with its essential oil. The most serious objection to its employment ever brought forward is its supposed dangerous influence on the life of the fetus; and there are many practitioners of large experience who even at the present time hesitate to employ it on these grounds, stating that, if fatal results do not ensue previous to the birth of the infant, convulsive disorders attributable to its use frequently occur, which carry off the child within some of the earlier hours of its existence, these being due to the transmission from the mother to her offspring of the poisonous properties possessed by this drug. It is impossible to deny that the effects of remedies administered to the mother are capable of transmission through her to her child; though how the poisonous properties of a drug can be exhibited in the child, no manifestation of such an effect being visible in the mother, I confess I am at a loss to imagine.

It is highly probable that the different results witnessed by various practitioners in the use of ergot depend not so much