the prominent point in its centre I freely applied acid nitrate of mercury over a space about one-third of an inch in diameter. Next morning, I removed the scab which had formed, and freely passed the strong carbolic solution into the little opening formed in the mass as well as I could with a quill pen charged with the liquid (and I may say that I find this a very convenient instrument for the purpose). At this time the swelling had increased considerably in size, was more tender and inflamed and painful, and was threatening to be a very formidable case of the disease. Now, mark the effect of the treatment. The acid was freely applied twice more, during the day, and the very next morning on my visit, it presented the appearance of having suddenly collapsed. It had shrunk greatly in size, was flabby, and far less painful, and its vitality was plainly destroyed. In four or five days, nothing remained but a little hardness about its base, and it rapidly got quite well. No core was ever discharged, and no pus appeared after the first application of the carbolic acid.

Now, to what does such a history as this point (and I could give several such histories did time permit)? I think it says, as plainly as possible, that whatever the predisposing causes of boil or carbuncle may be, the disease itself is essentially a local one; that it is a disease parasitic in the skin or its sebaceous glands, and that it begins with a central portion or stem, from and around which, as a root, the rest of the mass grows and extends. The spreading fungus-circles common in our meadows, and known as fairy rings, give us an excellent illustration of the type of growth; and I think that the singular and constant effect of the destruction of the central portion in the way I describe, proves (as Mr. Startin thought) that which it is so difficult to demonstrate with the microscope.

I do not say that, when a huge carbuncle with its enormous growth into, and infiltration of surrounding cellular tissue has taken place, carbolic acid or anything else can be relied on absolutely and at once to stop its progress. It will probably then to some extent run through the stages of its life-history, but I believe that this is entirely because destruction of its centre is no longer the destruction of the life of the circumference, and because of the difficulty or impossibility of bringing the acid into contact with enough of the diseased mass. But even in a case or two of very large carbuncles, which I have seen for the first time in their later stages, and where the acid has been freely and assiduously passed into every hole which existed, I have been greatly satisfied with the apparent effect of the acid; and certain it is that, *wherever it touches* diseased tissue, all sloughing and supuration at once there cease, no further extension of disease takes place, and a most striking change from dirty slough to florid granulation occurs in the course of a very few hours. So much have I been struck with this, that I propose, when the opportunity of a large developed carbuncle offers, to inject a watery solution of the acid into various parts of the diseased mass, in the hope of thus completely destroying it even at this stage.

To sum up, the doctrines implied and acted upon in this paper are:

1. That boils and carbuncles are not mere inflammations and sloughings of cellular tissue, but specific diseases.
2. That they are parasitic, and, as such, endowed with a definite life and history.
3. That, in their early stages, they may be infallibly destroyed and aborted by destruction of their central stem or root; and that, even after this stage has passed, they may generally be destroyed, and in all cases, at the very least, greatly modified, by the free application of carbolic acid.
4. That, to produce this result, the acid must be freely introduced into the central portion of the disease, and also into any other part where an opening exists or is formed artificially.

Until lately I had been in the habit of using a much weaker solution of the carbolic acid in oil or glycerine than I have spoken of above; but I now find that, when used in small quantities, the stronger solution is quite safe and very slightly irritating, whilst its destructive power is, of course, much greater. Where, therefore, it is only intended to insert a small quantity into the mass, I advise that it should be of full strength; but where it is to be used more freely, or over a large surface, I only employ it much more dilute. The only constitutional effect I have ever witnessed from its free external application is the well-known blackening of the urine, and this has never appeared to produce the slightest evil result.

PRIZES AT APOTHECARIES' HALL.—The successful candidates for the botanical prizes of the Apothecaries' Society for 1876 were: 1. Richard Bredin, Liverpool School of Medicine, a Gold Medal; 2. Herbert Alfred Hill Fenton, St. Thomas's Hospital, a Silver Medal and a Book.

ECLAMPSIA IN A CASE OF DIPSO MANIA.

By F. MURCHISON, M.A., M.B. Edin.,
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CASES of convulsions in the pregnant, parturient, or puerperal state, are not unfrequently encountered by the physician-accoucheur; but their great rarity in asylum practice induces me to refer to the following as instructive, interesting as being associated with dipsomania, and typical of a disorder that is apt to become frightful in its manifestations, and, in the absence of judicious treatment, fatal in its results.

M. H. C., a robust married lady, thirty-six years of age, and the mother of three children, was admitted as a voluntary patient into the Crichton Royal Institution, in January of the present year. Her mental peculiarity consisted in a "great liking" for spirits, in which she had more or less recklessly indulged for some four years. On admission, her husband informed us that she was *enccinte*, that he expected her confinement about the end of April, and that he would remove her before her accouchement. The restrictions of asylum life, and probably also the withdrawal of her favourite indulgence, caused her, at first, much unhappiness. Time, however, made her contented, and the amusements and amenities of the asylum, cheerful and happy. Her gentle and amiable disposition endeared her to the other patients, who, whatever be their mental capacity, can always appreciate kindness. She became industrious and affable, and never assumed the querulous and dissatisfied demeanour characteristic of many dipsomaniacs. Her behaviour in every way was rational and circumspect. She enjoyed excellent health, until one evening an excited patient scolded her, and insinuated something unpleasant about her condition. This grieved her greatly. The following night she was wakeful, and in dread of some indefinable, but anticipated calamity. In the morning, she complained of headache, dizziness, impaired vision, and great general malaise. After partaking of some breakfast, she rallied somewhat, and got up with no very marked symptoms of approaching serious illness. Presently, one of the patients informed the attendant, who was in another part of the gallery at the time, that Mrs. C. had fallen into the fire. The attendant rushed in, and found her, *she thought*, burnt to a cinder. In the utmost consternation, she ran for the medical superintendent, who lost no time in seeing the patient, and devising means for her safety. He found her clonically convulsed, with purple congested face and hands, embarrassed inspiration, stertorous expiration, and a bloody froth issuing from her mouth; rapid and feeble pulse, and entire loss of sensibility; with the dorsum of her right hand severely burned, and her cheek cut by contact with the fender in her unconscious fall. She was removed to bed, and no sooner was the fit over, than others, to the number of five, followed in close succession, their severity being such as to cause great and immediate danger to her life. To prevent their recurrence, chloroform inhalations were decided upon, and continued uninterruptedly for eight hours, during which time thirteen ounces were administered, with the result that the convulsions were lessened in number and severity. Some embarrassment of the respiration and circulation contraindicated the continued use of the chloroform, and it was deemed advisable to stop its administration for a time. Before the patient was fairly awake, however, the fits recurred; and inhalation was again cautiously resorted to, and continued for four consecutive hours—six ounces having this time been administered, with the same influence over the number and severity of the convulsions. It now became, from the state of the respiration and pulse, highly dangerous to continue the anaesthesia, and chloral injections of twenty grains every hour till sleep was induced, were substituted. Three of these injections were sufficient to produce the desired effect, and the patient slept soundly for six hours. On awaking, she stared wildly about, and repeatedly exclaimed "Oh my head, my head!" The bowels and bladder moved, and she again lapsed into slumber, which continued unbroken for seven hours. The urine passed had a smoky and turbid appearance, and, on the addition of heat and nitric acid, was found to contain about a fourth of albumen. No tube-casts were detected.

Vomiting of a dark, dirty, and fetid matter mixed with bile took place at intervals, while paralysis of the bladder likewise showed itself, and necessitated the use of the catheter for two days, at the end of which there was a recurrence of the fits in a milder form, but they again readily yielded to the chloral treatment. Thirty-six hours after this the convulsions again recurred for the fourth time, and again were subdued by the internal use of forty-grain doses of the same hypnotic. Shortly afterwards, prodromic symptoms of labour began to be recognised; these lasted for two days, when true uterine contractions commenced, and in five hours, expelled breech foremost, a well developed male foetus, which, from the desquamated state of the cuticle and other *post mortem* appearances, must have been dead some days. The

placenta was removed, and there was no hæmorrhage nor any prominent symptom, save a severe gastric pain which lasted several days, and added greatly to the discomfort and exhaustion already present. Under the administration of suitable tonics and light nourishing food, the patient made a good recovery. She is still in the Institution and enjoys excellent health.

The causes of eclampsia have been for a long time, and are even now, a subject of much speculation; and, although much has of late years been done by eminent physicians to ascertain their real nature, the theories promulgated as to their origin and *modus operandi* require further illustration to make them acceptable to the most thoughtful of the medical profession. It is not surprising, therefore, that some have looked upon the supposed causes as so many effects of an unknown mental or physical potentiality, generating by impression in the system, and having acquired dynamic energy, causing slowly or speedily the convulsions and their morbid accompaniments. I am inclined to believe there is much truth in this theory, and that the case adduced is one that goes to prove the existence of some such agency. The comparative absence of premonitory symptoms; the susceptibility of the system from the uterine state to impressions; the predisposition through alcoholism to neuroses; the unwarranted abuse received, and the previous good health of the patient, all point to this conclusion. Fear, independently of any physical state, is known to be the exciting cause in many cases of epilepsy, and it is probable that in this instance its effect on the nervous system was the most important factor in causing the "machinery of life", already in a state of unstable equilibrium, to run riot. Doubtless, the previous intemperance of the patient had greatly predisposed her system to epileptiform convulsions, which are well known to result from excessive drinking. There are at present in this asylum cases which conclusively prove that alcohol, in addition to its other baneful effects, is potent enough to cause such seizures.

The treatment of eclampsia must respect the cause of the disorder, whether it be albuminuria, uræmia, hydræmia, or anæmia, and take cognisance of the diathesis and development of the patient. It must remove, if possible, all sources of moral, mental, or physical irritation, and aim at success without resorting to empiricism.

In the case described, chloroform did much to ward off the fits; but it was second in importance to chloral-hydrate, which I think worthy of the strongest recommendation. The tincture of the perchloride of iron was fairly tried and found wanting as a special curative agent. The bowels and bladder were attended to, and all known sources of irritation, except the uterine, removed. The dietetic treatment consisted chiefly of milk and beef-tea, on which the patient almost exclusively lived during the acme of her illness. When convalescence commenced, stronger food was cautiously used, and continued until an ameliorated condition justified a recurrence to the ordinary asylum diet.

INTESTINAL OBSTRUCTION, WITH STERCORACEOUS VOMITING, TREATED BY LARGE DOSES OF OPIUM, FREQUENTLY REPEATED.

By HERBERT JUNIUS HARDWICKE, M.D., Sheffield.

R. T., A MARRIED, healthy looking, and stoutly built man, about forty years of age, called at my surgery on the morning of October 18th, and complained of a severe pain in the abdomen, which commenced early in the morning of that day. For four days previously, he had been taking purgative medicines from a druggist, but could not get his bowels to respond to them. He requested me to give him some medicine to open his bowels, or he should die from the pain. I sent him home, with strict orders to go to bed and foment his bowels with hot water flannels, and to have an injection of one pint of warm gruel at once; and gave him six pills, of one grain of calomel and half a grain of opium in each, to take one every second hour until he was relieved from pain. I was at the time due at a labour-case, and promised to see him as soon afterwards as I could. The same evening, I called to see him, and found that he had not had a motion, and that the pain was worse. His face was pale; his countenance anxious; pulse 80; tongue coated; he had sickness, but no vomiting. The abdomen was distended with tympanites, and there was pain referred to the right iliac region more particularly. I ordered a continuance of the fomentations and a repetition of the enema, which latter was returned with no fecal admixture whatever. One grain of opium pill was now given to him every two hours. I saw him again early the next day (October 19th), and found him much worse; tongue dry and brown; pulse nearly imperceptible. The pain was greatly increased, and more generally over the abdomen; he had sickness and vomiting. I gave

him brandy and water, and ordered him to continue taking the pills every second hour. I saw him again in the evening with a neighbour practitioner, who recommended an increase in the quantity of the opium. I accordingly gave him one grain every hour, and brandy and water regularly. The vomited matter was now decidedly of a stercoraceous character, and the pain excessive; and the patient seemed inclined to sink. On calling to see him next morning (October 20th), I found he had been vomiting fecal matter incessantly during the night, and had been exceedingly full of pain. Whilst I was there, however, after a severe attack, the vomiting nearly entirely ceased; and just then the patient informed me that he thought the fomentations had moved the obstruction, as he felt greatly relieved. I at once, acting upon his own suggestion, ordered an enema to be administered, which, to my great satisfaction and the patient's intense relief, was returned in company with three or four hard pieces of feces, like black marbles. Shortly afterwards, he passed a large, dark-coloured, offensive stool, and from that time continued to improve. The pain gradually subsided, and the patient, in two or three days, was able to sit up and take food.

This case, to my mind, clearly proves the efficacy of opium in large doses, and frequently administered, in cases of intestinal obstruction. The obstruction here was clearly caused by the abuse of purgative medicines, which were administered by an incompetent person, who represented to the patient that he was qualified to practise; and opium was the cure. It appears to me that the value of opium in these cases is not sufficiently appreciated, at least in this country. I believe that in Germany the treatment I adopted in this case is pretty generally followed. I once heard a celebrated professor in one of the German universities say that more harm than good was often done in cases of intestinal obstruction by too much interference on the part of the medical attendant, especially in England. Of course, there are many cases of intestinal obstruction which demand prompt interference, in order to save the life of the sufferer; but many of such cases require operations, such as gastrotomy, from the mere fact that the previous treatment has been injurious, or, in other words, because the medical attendant has "done too much", instead of allowing Nature, assisted by opium, to overcome the difficulty. Too much interference in these cases is worse than if the patient had been left entirely to the care of Nature. I think it must be admitted that opium, given in full doses and often repeated, is the remedy—and the only remedy—in cases of intestinal obstruction. It might perhaps be urged that the large amount of opium given in such a short time would be injurious. I can only say that this man took, from six o'clock in the evening of the 18th to the same time on the 19th, thirteen grains; and from then until eleven o'clock in the morning of the 20th, seventeen grains; in all, thirty grains in forty-one hours, without the slightest sign of narcotism whatever.

SOME FURTHER CONSIDERATIONS IN RELATION TO LIFE-INSURANCE.

By ARTHUR S. UNDERHILL, B.A., M.B., Tipton.

I HAVE read with much pleasure the article by Dr. Thomas, in the JOURNAL of June 17th, on "Suppuration of the Middle Ear in relation to Life-Insurance". I know that each specialist must have his own hobbyhorse; but if we, as ordinary medical examiners, are expected to ask questions, or critically examine each organ or cavity separately, ours would not be an easy task, and there are few lives we could recommend as absolutely safe, and not doubtful in some part. It is a good plan to adopt the rule which is followed by some insurance offices, viz., that of having the candidate examined by the medical referee for the district, and of having a separate private report from the ordinary medical attendant of the candidate, as there are some diseases of which only the "family doctor" is cognisant, and an account of which no amount of cross-examination on the part of the medical referee will elicit; I refer particularly to syphilitic affections and uterine diseases. *Apræpos* of this, I will refer to a case now *sub judice*, which has come under my own observation. Some three years ago, Mrs. T. asked me to attend her in her confinement. She stated that she had had several "losses" which had, however, ceased before becoming serious. She was expecting daily; the same evening I was hurriedly sent for as my patient was flooding; I found her blanched, almost pulseless, and lying in a pool of blood. On making a digital examination, I expected to find placenta prævia, but what was my surprise to find a large ulcer with ragged indurated edges, implicating the whole anterior part of the os and cervix uteri, bleeding freely, and breaking up when touched. The os was slightly patent posteriorly; in a short time the hæmorrhage