the acid, fifteen minims of liquor potassæ, and three ounces of water, allowed to digest during three days. Their action was so evident, that I found it impossible to use any more so large doses. I, therefore, made seven other observations on the effect of similar draughts containing only six grains, and I found them to take all the effect which a dose of fifteen grains given as powder takes.

I made sixty observations with pills containing either the acid or the crude powder combined with confection of roses. I confine my remarks to those containing the acid, since I observe no essential difference in action between them. Each pill contained four grains of chrysophanic acid. I find the action of the drug in this form more uniform than in any other, except that of an alkaline draught. Eight grains are sufficient to take with effect in both kinds upon the majority of persons. Action is delayed almost invariably beyond two hours; often, if sleep intervene, the dose taken at night does not operate until the next morning. In that case, sickness, as always, is the first effect, but the purging ensues almost immediately.

It appears, then, that to give chrysophanic acid in the form of a pill, whereby its diffusion in the stomach is delayed, or as a partial solution (in an alkaline fluid), enhances its powers; for eight grains in the former case and six grains in the latter seem equivalent in power to fifteen grains given as powder. At the same time, by both of these means its action is rendered more equable, and in both, although chiefly in the latter, delayed. On the other hand, neither increased action nor the greater facility of absorption offered by these means increases depression.

Lastly, I repeat that four grains of the resin (which I do not know to have any irritant power as a topical application) are equal to from fifteen to twenty grains of the acid as measured by its effects. From these three hundred and nineteen observations, I conclude—

1. That chrysophanic acid is an emetic purge; that its action is as certain, when given in appropriate doses, as that of any other drug which acts in either of these ways; that, if either kind of action should be wanting, on account of the dose having been too small, it is the purging which will fail to appear; but that is rare.

2. That its action is favoured by its exhibition in a manner favourable to its absorption; *i.e.*, by its diffusion in water, by its exhibition as a pill, and, above all, by its combination with a strongly alkaline fluid; that its action may be delayed by sleep and modified by a full stomach.

3. That its dose is, as powder, not less than six grains for babies; at twelve years, one may give ten grains; above that age, fifteen grains, a dose which it is not often necessary to increase. As a simple draught, perhaps ten grains is enough for most adults. As an alkaline draught, six grains is an average dose, if three days have been allowed for digestion and partial solution. As a pill, eight grains is an average dose, six grains often suffice, twelve grains are too much.

4. That the most convenient form for exhibition is, for adults, that of a pill. In children, the powder, which must be mixed with honey or jam, since it cannot be mixed with water; it is tasteless.

5. Lastly, that I see reason to regard chrysophanic acid as an useful addition to our list of remedies, because it affords a means of clearing out the *prima via* with a thoroughness and promptitude not equalled by any other medicine with which I am acquainted, a combination of tartar emetic and ipecacuanha alone excepted; while it is at once more certain to produce both purging and vomiting than that, and is unattended by the serious depression which is often an inseparable objection to its employment; that the power of evacuating large quantities of bile which I claim for chrysophanic acid especially fits it for the purpose named.

ON A NEW REMEDY IN CERTAIN FORMS OF SKIN-DISEASE.

By J. IVOR MURRAY, M.D., F.R.C.S. Edin., Scarborough.

NEARLY twenty years ago, when I went out as Her Majesty's Colonial Surgeon to Hong Kong, I accidentally became aware of the existence of a remedy, known to the natives of the Malay Peninsula (for the cure of ringworm and some other forms of skin-disease), and which in their hands had proved most successful. After much trouble, I obtained some of the remedy in the form of an imperfect tincture, prepared by immersion and maceration of the root of a plant in the impure native spirit called arrack, and verified the wonderful power it exerted in the cure of various forms of tinea and some forms of eczema. The quantity of the remedy I obtained was at first very small, and I encountered great difficulty in getting it in any quantity, as the secret appeared to be kept in one family. After much trouble, however, I succeeded in

increasing my supply, and got proof-spirit substituted for the arrack in its preparation. Subsequently, Messrs. Watson of the Hong Kong Dispensary negotiated with the natives to procure the remedy more freely; and, at my request, they have made arrangements to supply it, to any reasonable extent, through their London agent Mr. Edwards, 38, Old Change, of whom it may now be obtained. It is known as the fluid extract of *Tong Pang Chong*.

I have submitted some of the root, through the kindness of my friend Dr. Hooker, to Mr. Jackson, the curator of the Kew Museum, who pronounces it to be "the produce of a Berberideous plant, and nearly identical with *Akebia quinata* (Decaisne)". Mr. John Thomson of King's College has extracted from the tincture a crystalline substance, which may prove to be allied to chrysophanic acid, and so account for its action.

I shall not pretend to enter into any explanation of the *rationale* of its curative power, but limit myself to the statement that I have used it in hundreds of cases, often with almost magical effect, and that it is now much employed in the East. It is necessary, however, to discriminate in selecting the cases in which to test its value. I have found it most useful in tinea circinata, where the circular margin of the disease is maintained; and perhaps it is even more successfully used in that very troublesome form of eczema (tinea?), which attacks the inside of the thighs and perineum, and the parts around the anus, which I have known to resist every description of treatment, internal and external, even in the most experienced hands; and I may add that, both in this and other forms of disease, I have found it succeed where the Goa powder had completely failed.

The method of application which I follow is to paint the part over by means of a camel's-hair pencil three times, allowing it to dry between each coat, and this is done every night at bedtime, until the part resumes its natural appearance.

I have employed it successfully in many cases in this country, both in my own practice and in consultation with other practitioners. The following is a characteristic case:

A. B., a gentleman high in the Bengal Civil Service, arrived in England in July 1874, then suffering from eczema marginatum in a slight degree. He placed himself immediately under the care of a distinguished specialist in London, and subsequently was treated by one of our most celebrated physicians, who ordered him to Harrogate. From the latter place he came here, having, from the first, steadily got worse; so that, when he put himself under my care on September 22nd, or fourteen months after the first appearance of the disease, the patches were over eight inches in diameter, and the patient in agony, and almost sleepless. After trying other treatment unsuccessfully, on September 29th I applied the *tong pang chong*; and, on my visiting him next day, he declared the result to be almost miraculous. He was obliged to leave Scarborough on October 4th, and shortly afterwards returned to India. The disease had entirely left him before he embarked.

In conclusion, if this new drug prove, in the hands of other practitioners, half as efficacious as it has done in my own, it will be a valuable addition to the means of treating one of the most troublesome classes of disease, and quite justify me in bringing it before the notice of the profession.

CASE OF SYNCOPE FROM ETHER INHALATION.

By R. J. PYE-SMITH, F.R.C.S. ENG.,
Surgeon to the Sheffield Public Hospital and Dispensary.

HARRIET T., aged 14, was admitted into the Sheffield Public Hospital on May 3rd, 1877, suffering from disease of the right hip, of two months' duration. She was a delicate-looking child, and did not appear so old as fourteen. She was somewhat feverish (temperature about 100 deg. Fahr.); the heart's action was rapid (about 120 beats per minute), but it was not accompanied by any *bruit*, and the pulse was regular and fairly strong. As the hip was completely flexed and very tender, it was determined to administer ether, in order to examine the part and to apply a splint. Accordingly, on May 5th, the assistant house-surgeon, Mr. A. H. Denton, proceeded to anaesthetise the patient, who was lying in bed. An American inhaler was used, composed of a number of folds of webbing stretched on a frame, surrounded, except at the top, by India-rubber; and an ounce of ether was poured on to it. At the first whiff, the child began to cry and to struggle slightly; but on being told to breathe quietly, she at once began to inhale in an exemplary manner—long, deep, regular respirations—and in less than a minute was evidently becoming anaesthetised. I was commencing to manipulate the limb, when we noticed the breathing was quickly becoming extremely

shallow; the pulse, however, was good and the inhaler was kept to the face. In a few seconds more, the movements of the chest and abdomen were scarcely perceptible, and the face, which had till now been of good colour, began to be blanched. The inhaler was at once removed; but the pulse now began to fail, and was soon scarcely perceptible at the wrist, though the heart was easily felt beating against the chest-wall. The pillow was pulled from under the head, and the chin thrown forcibly upwards by pressure behind the angles of the lower jaw. The muscles seemed to be fully relaxed, and the surface quite insensitive. The case looked exactly like one of syncope from chloroform, and I expected to have to resort to artificial respiration. On flipping the chest and face, however, with a cold wet towel, slight inspirations were taken, and very soon the head was moved, colour returned to the face, and the pulse was again felt at the wrist. On moving the diseased joint, the child opened her eyes and began to cry, and presently asked if we were putting her leg straight. The inhaler, with two drachms more of ether, was now reapplied, and again the patient began to inspire very freely. Only a few inspirations of ether were allowed, but they were quite enough to produce complete anaesthesia, and, although the pulse did not again flag, respiration soon became extremely feeble, as it had done before. The inhaler was but occasionally applied for short periods, and without being replenished with ether, whilst a dislocation of the hip was reduced, and weights and a long splint were applied to the limb. In about twenty minutes from the commencement of inhalation, when all was finished, the child awoke and talked a little nonsense, but was soon quite rational and comfortable. There was no sickness nor other observed ill effect of the anaesthetic. The ether was of specific gravity .735, and was from the same bottle as had been successfully used the day previous for anaesthetising a boy.

The above case is, I think, of considerable interest, as it points, perhaps more conclusively than the one recorded by Mr. A. S. Morton in the *Lancet* of October 14th, 1876, to failure of the heart's action, as well as of respiration, during the inhalation of ether, without obstruction of the respiratory passages. I have seen difficulty of breathing during ether inhalation, from collection of mucus in the larynx and in the nose; but in this case here recorded there was no evidence of any such condition. Nor do I think that a falling back of the tongue can have produced the symptoms; for it was distinctly in response to the wet towel, and not to the previous pushing upwards of the jaw, that respiration was restored, and, moreover, the pallor and the rapid failure of the pulse point to a different cause; there was at no time any congestion of the face. It is not, I know, uncommon for patients to breathe very lightly when recovering from ether anaesthesia after the completion of an operation; but in such cases they are, I think, always sensitive, and can at once be roused by the infliction of pain; this was not the case in the present instance. Contrary to what has been my experience in cases of chloroform syncope, the pulse gave no warning of the failure of respiration, though it became imperceptible very soon after the breathing had ceased. In conclusion, I may say that the impression of Mr. Denton and myself is that, if we had been using chloroform instead of ether, it would have been less easy to avert a fatal termination to the case.

A CASE OF OPISTHOTONOS CURED BY CHLORAL-HYDRATE.

By HARRY DAVIS, L.R.C.P.Lond., M.R.C.S.Eng., etc.,
Callington, Cornwall.

A SHORT time since, about midnight, I was requested to visit a man immediately, who was thought to be *in extremis*. On my arrival at the house, I found him greatly convulsed, and being supported in an upright posture by two persons, his head drawn back to its extreme point of flexion, and the spinal column arched forwards and very painful, especially near the base of the sacrum and towards the lower extremities. His face presented the usual *risus sardonius*, with retraction of the lower lip, etc. The eyes were fixed and motionless, with slightly contracted pupils. The countenance was very pale and distressed. Speech was nearly obliterated, words being very indistinct, with an ejection of saliva at each attempt to speak. He could neither sit, lie, nor stand; and, on the removal of his support, he would immediately fall backwards. The heart-sounds were weak; pulse regular and small, about 72. I at once ordered him a mixture containing eighty grains of chloral-hydrate, half a drachm of extractum opii liquidum, and camphor mixture to four ounces; a fourth part of the mixture to be taken every four hours until the spasms and pain were relieved. After the third dose was taken, he was much relieved and slept a short time. I then ordered him some powders containing calomel and

jalap; one to be taken every six hours until the bowels were freely acted upon. The back was occasionally rubbed with a liniment composed of turpentine and belladonna liniment. During the succeeding three or four days, he was frequently threatened with the spasmodic attacks; but, on taking a dose of the chloral mixture, he was immediately relieved.

When the spasms had entirely abated, hemiplegia of the left side and paralysis of the right side of the face set in. I then ordered him a mixture containing iodide of potassium with compound tincture of cinchona at a later stage; and occasionally at night, when there was much restlessness, a dose of the sedative mixture. His diet consisted of light farinaceous foods and beef-tea.

After a month's treatment, he became quite convalescent, and soon afterwards resumed his work, and continues to do so up to the present time, without the least sign of inconvenience or remains of the paralysis.

The history of the case, as far as I can gather, is as follows. About eight weeks previously to this attack, the man was employed in repairing a building, when the scaffolding gave way, causing him to fall several feet, when he seemed to have received a blow on the head, as he was picked up insensible. This condition passed off within a few minutes, so that he was able to resume his work without any inconvenience. From the time of the accident till within a few weeks of his illness, he occasionally complained of slight pain in the frontal and temporal regions of the right side of the head, with a certain amount of loss of hearing. A *thick purulent* discharge was then observed to be oozing from the right ear (but never any signs of hæmorrhage), with more pain, and at times very intense, which caused him to give up his work. He then applied to a medical man, who attended him until I was called to see him in his very grave condition. What the remote cause of the convulsions was, I think, is very doubtful. Could it be possible that a man receiving a fracture at the base of the skull, however slight or obscure, continued his work for six weeks with little or no inconvenience? or could it have been an ordinary case of localised inflammation terminating in suppuration? or had he been taking nux vomica or strychnia before I was called to see him?

THERAPEUTIC MEMORANDA.

PITYRIASIS VERSICOLOR TREATED BY MEANS OF GOA POWDER.

AT a time when the action of Goa powder is so much under discussion, it may not, perhaps, be out of place to give my experience of its application in a disease for which I believe it has not been previously used. If I relate one "out of several cases", it will illustrate my point sufficiently. A gentleman applied to me for advice with his chest and abdomen covered with pityriasis versicolor, which had existed for several years, and was gradually creeping above his collar; I gave him the following prescription (which I find to be a very convenient form).—R Goa powder gr. 30; acetic acid ℥i 10; glycerine ʒj—and told him to apply it over the affected parts at bedtime for four nights. He saw me again in a fortnight, when the disease had entirely disappeared, and the only marks visible were some livid patches, due to the application, which were gradually disappearing. He then told me that the morning after the first use of the remedy, the parts anointed presented a very red appearance, as if a mustard poultice had been applied, but that the irritation did not increase much, although he persevered with the treatment for the time recommended.

I find the above formula a convenient and efficient application for ringworm, and hope soon to be able to give the history of some obstinate cases of pityriasis rubra which are now being treated by the same preparation.

A. W. MAYO ROBSON, M.R.C.S., L.R.C.P.,
Demonstrator of Anatomy, Leeds School of Medicine.

CHRYSOPHANIC ACID.

I ORDERED chrysophanic acid ointment for an obstinate case of ringworm of the scalp, which extended behind the left ear. After a few applications, the skin of that side of the neck and ear became swollen and inflamed, of a dark or dirty red colour, its surface covered with minute vesicles. The skin around both eyes (about half an inch wide) was stained claret-colour; and conjunctivæ so intensely inflamed that the patient could not open her eyes for days. When the ointment was discontinued, the inflammation gradually subsided. I tried it also in another case of ringworm, when the skin around became much inflamed and of the same dark red colour.

THOMAS E. JONES, Llanrwst.