little or none, neither did any that I came across suffer from conjunctivitis or ophthalmia of any kind; and, partly on this account, and partly from the well known contagious nature of the granular lid, and the habits of the Arabs of wiping anything and everything, their own eyes and their children's, etc., on their never washed calico-shirts, I am rather disposed to look upon their ophthalmia as a contagious disease, acquired from contact with the fellahs of the cities of Egypt and Palestine, among whom it is almost universal. And in this opinion I am strengthened by the observations of Mr. Merrill, the American Consul at Jerusalem, who told me that there was no ophthalmia among the great tribes east of Jordan. Another argument against the opinion that their ophthalmia is due to the heat and sand of the desert, is that, while ophthalmia is prevalent among the Arabs inhabiting the comparatively elevated plateau and stony valleys of the Sinaitic Peninsula, those who live in the great deserts of Arabia Magna do not seem to suffer from it at all; and, at Akabah again, where a number of low class Arabs are crowded together in huts, ophthalmia was very prevalent. I believe that in this, as in most other cases, it is originally due to dirt and overcrowding, and is then spread by contagion.

Constipation is universal, and sometimes appears to simulate a false dysentery, with great pain in the bowels, which is relieved at once by a purge. They call a pain in the abdomen, or a colic, a "heart-ache," and I have removed many a "heartache" with a gamboge pill. Their habit of over-eating when they get the chance, alternating with more or less prolonged periods of semi-starvation, will account for the prevalence of this complaint.

Skin-disease is not so frequent as one would expect from their uncleanly habits, if we except phtheiriass; however, I saw two cases of impetigo, and I was given an account of a kind of moist purulent eruption, which, in the spring-time of the year, is apt to attack both men and camels, especially the latter. The hair falls off the places attacked, and the seat of the disease becomes covered with scabs; it also has a very unpleasant smell. They call it "jarrub," and believe it to be catching. Sulphur, externally and internally, made into a paste with butter, are the native remedies for this disease.

In certain districts, notably Akabah, they suffer from ague, but this disease is not common among the Arabs proper. The late Professor Palmer states that "they are sometimes visited by an epidemic, not cholera, probably the plague, which they call 'the yellow pest.' It comes with the hot winds, and strikes them down suddenly in the midst of their occupation, but it is said never to attack the country of our Lord Moses, where grow the shiah and the myrrh, that is, the elevated granite-region about Mount Sinai."

It will be seen from the above that the diseases to which the Arabs are subject are few; and if we except those infectious diseases which come to them from without, such as cholera and small-pox, they appear to be a very healthy people.

The remedies they are in the habit of using are not many in number, and are usually derived from those plants which are most widely distributed. As a diuretic, that is, for pains in the back, and gravel, they use the retem, or broom (*Spartium monospermum*) making a decoction of the top shoots in hot water, and drinking it; they say it is also purgative. This shrub, which provides them with fuel and their camels with a scanty nourishment, is almost universal; we saw it in flower on the way to Petra, and the inflorescence, which is purple and white, gives out an exceedingly sweet perfume. It has a very bitter taste.

Several species of wild melon, of the family *Bryonia*, allied to the elaterium (which also grows in these parts), are in common use as purgatives; the native method of using them is ingenious. A fruit is split into halves, the seeds scooped out, and the two cavities filled with milk; after allowing it to stand for some time, the liquid, which has absorbed some of the active principle of the plant, is drunk off. A milder remedy is camel's milk, which appears, under some circumstances, to be purgative to the Arabs.

The order *Compositae* furnishes several medicinal herbs of which the Arabs make use. The *Santolina fragrantissima*, a graceful plant of a sage-green colour, bitter taste, and strong fragrant smell, furnishes them, in the form of an infusion, with a carminative, good for colic and all painful affections of the abdomen. In the bazaars of Cairo, the fragrant dried heads are sold for the same purposes as camomile. I was told that there are no snakes in the districts where the plant grows; and the natives believe that the smell of the plant is sufficient to drive reptiles from a house, and it is used for this purpose in Cairo and other towns.

Another plant of the same order is an artemisia, or wormwood, with a very strong aromatic odour and bitter taste. The fellahs use it to put in their bedding to drive away vermin. This use of the plant

appears to be very universally known, witness the old English rhyme—

"When wormwood hath seed, get a handful or twain,
To save against March, to make flea to refrain:
Where chamber is swept, and wormwood is strewn,
No flea, for his life, dare bide, or be known!"

From the seed of some of the kinds of artemisia, which grow in these parts, santonine appears to be obtained. In the wilderness of Judaea, near to Beersheba, we found a pretty little calendula, or marigold, very common. It became extremely abundant along the Mediterranean sea-board, and is used by the natives as a sort of tea for flatulence and pain in the abdomen. Knowing how largely a liniment derived from this plant was advertised by homœopaths, I tried to find out if they used it as an external application, but they did not know of its virtues as such. One of the commonest desert-plants is the zygophyllum, so called from the leaves being composed of short succulent jointed segments; these, bruised in water, form a mucilaginous liquid, of which the Arabs are very fond as an application for sore eyes. It has an exceedingly nauseous taste, but this fact only appears to commend it to the notice of the camel, who devours it greedily. A curious tropical plant, which we found in the Ghor, at the south end of the Dead Sea, is the osher (*Callotropis gigantea*), a large tree-like asclepiad, containing simply enormous quantities of milky acid juice. Its properties are stated by Endlicher to be powerfully purgative and emetic; but the natives use it to give to women whose milk is scanty, probably in accordance with the doctrine of signatories. Here, also, grows the castor-oil plant, but its virtues are unknown to the natives. A very striking plant, which, perhaps, I should have mentioned before, and which often hangs in graceful dark green festoons from the granite walls of the gorges of Arabia Petrea, is the caper plant (*Capparis spinosa*). The natives are very fond of the fruit, which has a warm aromatic taste, and they stroke the region of the epigastrium appreciatively after eating one or two. The cortex of the root is said to be aperient and diuretic. Another fairly common plant is a hyoscyamus, called by the natives sekharan, with fleshy leaves and purple flowers. The dried leaves are used by the natives to smoke, and produce a kind of intoxication or delirium; and an infusion of the fresh leaves possesses strong narcotic properties. It is nearly allied to the mandragora, which becomes common on the limestone downs in the south of Judaea. The Arabs are extraordinarily susceptible to narcotics. Our tobacco they could not smoke at all; a few whiffs make them giddy, and give them a headache; even a "Richmond Gem" cigarette is too much for them. Only two mineral substances appear to be regarded by the Bedawin as medicinal. One of them, sulphur, I have already mentioned; the other is a kind of common red coral, found on the shores of the Red Sea and Mediterranean, and sold in the bazaar at Gaza. As far as I could gather, they only use this as a charm.

In conclusion, I may mention that the few drugs which are really useful on an expedition of this sort, can be carried in a small tin box a few inches square. And a little doctoring is greatly appreciated by the natives. Purgative pills, quinine, some preparation of opium, a bottle of nitrate of silver and atropine drops for sore eyes, and some strong ammonia and powdered ipecacuanha for bites and stings, will go a long way. I took a good deal more than this, as I had a large party to "keep in repair," but the above list contains the drugs most generally useful.

A NEW SPLINT FOR THE TREATMENT OF TALIPES.

By F. T. PAUL, F.R.C.S.,

Surgeon to the Royal Southern Hospital, Liverpool.

It has always appeared to me, as a general surgeon, that, in our ordinary hospital-practice, cases of confirmed talipes frequently do not obtain the full amount of benefit that is possible; more frequently, I mean, than other varieties of remediable defect. I suppose that this would be explained, if it be really a fact, in different ways by different surgeons. The explanation that has occurred to me is simply that the mechanical treatment following any operative procedure needs to be so prolonged and so assiduous during the whole time, that the careful patience of either the surgeon or the patient often breaks down before the cure has been effectually and permanently established. I have been in the habit of using sheet-iron side-splints, with a foot-piece, fixed on by first firmly strapping the foot to the foot-piece while the foot is in its deformed position, and then forcing the side-splint to the leg, and so reducing the deformity. The plan answers well enough if the splint be refixed every few days for six or twelve

months. In my own practice, I observe that I generally keep up a pretty close supervision of the case for a month or two; then it gradually drops entirely into the hands of my house-surgeon; subsequently, it falls to the care of the nurse; and, lastly, it is lost sight of for a time, and, when seen again, is often as bad as when it first came under treatment. For a long time, I have felt that, if a surgeon had the time to undertake a complete supervision of his cases of talipes, he could usually cure them by simple mechanical means; and it was owing to the unsatisfactory results that I constantly met with in the practice of my colleagues, as well as myself, that I attempted to devise a splint which would be so easy to manipulate, that the surgeon could himself take in hand the treatment of his talipes cases without that loss of time which at present frequently causes him to relegate the duty to someone else.

The splint consists of the ordinary side-rods and padded ring of a Thomas's knee-splint (A). Joining the side-rods at the bottom is a

ring to walk upon, and a cross-bar from one to the other. This latter has a slot in the middle part of it, in which a strong steel ball can be fixed. The ball works in a socket attached to a plain wooden foot-piece (c). The foot-piece is attached to the socket by three or four ordinary screws, which can at any time be removed, and the former replaced by a boot when the treatment is sufficiently advanced (B).

The method of applying the splint is as follows. The foot-piece, with the ball and socket joint, is taken out of the splint, the joint unscrewed, and the ball removed, so that strapping can pass under the foot-piece anywhere. The child's foot is then very carefully strapped to the foot-piece, in such a manner that it will not require to be renewed for some time. The ball is then replaced and loosely screwed up, and the foot-piece with the limb fixed to the splint. It is unnecessary, as a rule, to put on more than a couple of straps round the leg and splint; but, when inversion is marked, a better fixation of the limb will be required, in order to be able to evert the foot. All that is left to be done is to gently force the foot into a somewhat improved position, and screw up the ball and socket joint. At the next visit, this is loosened, and refixed in a still better position; and, as it is only the work of a minute, it can be undertaken by the surgeon as he makes his daily rounds.

Children walk about easily in these splints, and, so far, I have met with very good success in using them. If only one leg be affected, a high sole should be made to the opposite boot to avoid any obliquity of the pelvis.

The drawback for hospital use is the cost. There is a good deal of work in the splint, and it must be well done, or the joint will not remain fixed when in active use. Mr. Critchley, of Liverpool, has taken great pains to carry out my instructions in making the splints, and has succeeded very well. He supplies them to the hospital at £1 each.

THE REV. HENRY ARNOTT, Vicar of Bussage, has been appointed Rector of Beckenham. The reverend gentleman, who is a Fellow of the Royal College of Surgeons of England by examination, was formerly assistant-surgeon and lecturer on pathology at St. Thomas's Hospital.

TOXICOLOGICAL MEMORANDA.

THREE CASES OF POISONING BY "HELLEBORE" POWDER.

As an instance and exposure of the credulity of the present generation with regard to quackery, the following account may be of slight interest.

At about 9.30 P.M. on Saturday, February 28th, a messenger requested me to see three people—R. C., his wife, and a lodger—who, he asserted, were dangerously ill, from having taken some poison, a sample of which he brought with him. These people lived two and a half miles from my residence; and, on my arrival, a little after 10 P.M., I found R. C., the husband, aged 61, looking very pale, prostrated, his pulse very feeble; pupils normal. He stated, in feeble tones, that he felt perfectly helpless, and very cold, but somewhat better than he had been. The wife, aged 60, who had been desperately sick and purged, was apparently going on all right, and said she was feeling much better than she had been. The lodger, aged 65, was very ill; he looked pinched and blue with cold, and had been sick and purged. Mustard and water had been administered to all three, with good effect.

The wife informed me that they all partook of the powder at about 7 P.M., and that, a few minutes after, her tongue "felt funny"; she was then sick and purged, had pain in the bowels; her hands, and subsequently the whole body, became cold and trembling. As far as I could ascertain, I should say that each of them took about a scruple of the drug.

From what I saw, I concluded that the quantity of poison taken had physiologically exhausted its effects, and that there was no necessity to administer emetics or use the stomach-pump, which would only increase the prostration. I therefore ordered hot bottles to be applied to the extremities, and brandy and hot water to be administered to each. All made a rapid recovery.

I was told by R. C. that the old lodger had recommended this hellebore powder for the "wind," the said lodger having gained considerable confidence by informing them that his "faythur was a bit uv a doctur loike."

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THERAPEUTIC MEMORANDA.

CUCAINE IN DENTAL SURGERY.

HAVING read with interest the reports which have appeared week after week of the various uses to which cocaine has been put, I thought a few particulars of my experiments with it in dental surgery might be interesting.

For extraction, I have tried both the solution and the hydrochlorate of cocaine itself, and, with the latter, have obtained very satisfactory results. It seems to answer best for front teeth and bicusps, also for stumps when separate. The following case will show the method adopted, etc.

R. W., a porter, aged 20, came to the Dental Hospital to be relieved of a lower right second bicuspid, which was above the average size and quite firm. I first surrounded the tooth, and about half an inch of the gum around it, with the corner of a napkin, to keep the parts dry, and prevent the cocaine from being carried off in the saliva. I then freely applied the crystals to the gum close around the tooth, three times, at intervals of two minutes each. After the second application, the gum was entirely anaesthetised, the patient not feeling the pricks of a sharp probe. A few seconds after the third application, with a pair of warm forceps, which I carefully hid from view, I extracted the tooth, and said nothing for some time. At last I desired the patient to wash out his mouth, but he began to smile, saying the tooth was not out; nor would he believe that it was until he had felt the empty socket with his finger.

With large teeth I have found it a good plan to treat as above, and then, just before extracting, to introduce the nozzle of a fine hypodermic syringe between the gum and neck of the tooth, and inject three or four minims of the 4 per cent. solution. This may not, however, be possible in all cases.

With molar teeth, more especially upper, although the pain is greatly diminished, there is always the twinge of the actual separation of the tooth from its socket, and the rupture of the nerves, etc., at the apices of its roots.

In all the cases I have seen, the gum has returned to its normal state in a short time, and there has been no unfavourable symptom