the membrana tympani can scarcely be avoided when the foreign body is deep; and, even if no wound be inflicted, the chain of bones may be disagreeably jarred and agitated. Weighted with all these disadvantages, the ear-scoop is placed in cases of instruments as *the* means of extraction of foreign bodies; and the student or practitioner who has not learnt sounder practice flies to it, perhaps, as a matter of course. If it were clearly understood that it is only to be used, as Dr. Nicholls advises, in the last extremity, or after consultation with an aural surgeon had failed, I should not wish to remove it from a place among surgical instruments, for I feel convinced that its opportunities for mischief would be so curtailed as to render it unnecessary to say another word against it. Nor would I so strongly object to its employment in cases where there is so much room in the meatus that the surgeon can see precisely what he is doing and where he is placing his instrument. But to any instrument, ear-scoop or other, the conditions of whose employment necessitate risk to the membrana tympani, I am prepared to offer a very stout opposition. If Dr. Nicholls will kindly refer to my remarks in the JOURNAL of March 18th again, he will see that he has accidentally misquoted and misapprehended what I said about allowing foreign bodies to remain in the ear. He says that I advise that *in all instances* the foreign body should be allowed to remain in the ear until syringing effects its removal. I did not lay down any such doctrine, or anything resembling it. My advice about allowing a foreign body to remain in the ear had reference solely to cases, happily exceptional, in which prolonged attempts with ear-scoops, etc., had been made unsuccessfully, causing tenderness, disturbance, and disposition to bleed, so that the view of the practitioner was impeded or prevented, and the difficulty of extraction greatly increased. In such cases, and in such cases only, did I recommend delay for the purpose of allowing the parts to recover a more natural condition. Dr. Nicholls's criticism, therefore, of my supposed doctrine, having lost its objective point, need not, so far as I am concerned, be disturbed. But I may say this, that if, in a case such as I referred to, the friends disputed my advice, I should at once recommend them to seek the opinion of some practitioner in whom they had thorough confidence; and I certainly should not be personally annoyed, whatever might be my fears for the integrity of the conducting apparatus of the ear in question, if I heard that the foreign body had been extracted on the selfsame day with an ear-scoop. I am very much afraid that the surgeon, armed with the ear-scoop or other extracting instruments, and the foreign body together, are sometimes more potent for mischief to the anatomy of the ear than the foreign body by itself would prove even if allowed to remain in the meatus for a lengthened period. Every one of experience must have met with cases in which foreign bodies have so remained for weeks and months without ill effects.

With Dr. Nicholls's remarks about the necessity of care in the use of instruments I cordially agree; and I agree, though not precisely in the sense in which he wrote the passage, with the remark that, "if proper care be employed, there is no more danger of injuring the ear with an extracting instrument than there is of making a false passage with a catheter". "If proper care be employed"—this is precisely the difficulty. It is most difficult without experience to learn what proper care is. No class of cases more commonly comes under the surgeon's observation than cases of stricture complicated by false passages; and no doubt, if foreign bodies in the ear were as common as stricture, the general use of ear-scoops would be followed by a parallel prevalence of injury to the tympanic membrane. Yet in either case the operators would probably affirm with confidence, and fully believe, that proper care had been exercised. Many of the cases of stricture in which false passages are made are cases in which the immediate use of a catheter is neither necessary nor expedient—cases of retention following a drinking bout in patients who are the subjects of stricture easily permeable under ordinary circumstances. Such cases yield to warm baths, aperients, and opiates; and with such it is wiser, if it can be managed, not to interfere instrumentally until the subsidence of the congestion resulting from the festivities. Similarly, it is wiser, in my opinion, to trust to the influence of a stream of water for the removal of a foreign body from the ear, than to attempt its displacement with rigid extractors working in a space extremely contracted and with so much risk to the integrity of one of the most delicate structures in the body.

That cases not amenable to syringing may occur I do not dispute, although I have not yet met with one. In such a case, I should prefer using a suitable pair of forceps, which could be guided with the utmost precision by means of the mirror and speculum, to employing an instrument so intractable as the ear-scoop.

After all that has been said, it is satisfactory to observe that the real difference between my views and those of Dr. Nicholls is extremely small, and would probably disappear altogether if our interchange of ideas were not impeded by the distance which divides us.

CASES OF SCURVY IN THE POLAR SEAS.

By ROBERT SMITH, F.R.C.S.Ed., Heckfield, Hants.

THE cases from which the following summary has been drawn occurred under my care during a cruise in the seas to the west of Greenland, extending as far north as to the entrance of Smith's Sound. There were seven cases in all. Four very severe ones, two of less severity, and one in which the disease was very slight, but still sufficiently well marked as to leave no doubt of its nature. As the leading facts of the voyage among the ice may be of service in giving a correct appreciation of the circumstances antecedent to the outbreak of the disease, they are briefly given.

The ship reached the ice on March 27th. On the thirteenth of the following month it was beset, and, failing to force a passage to the north, two days later was frozen in, the temperature having fallen so low as to freeze the mercury. We continued thus amid frequent falls of snow until May 3rd, when, after great exertion, the crew succeeded by sawing and blasting in clearing a channel through six thousand feet of ice, by which the vessel gained the open water. Some days later a thaw set in, when it was found that the potatoes and vegetables generally had suffered to such an extent as to be useless as food. They were thrown overboard. Thus, from an early date, the most important antiscorbutic elements of diet were cut off. Rice and oatmeal were allowed *ad libitum*, with a regulated quantity of peas twice weekly. Regular rations of rum were not allowed, this being reserved for periods of exertion.

No case of scurvy showed itself during the warm summer, or while on the sheltered Greenland side of the Straits. But in the month of August, after a period of great dejection, owing to having been again beset for several days, and amid a succession of cold misty weather, during which the men were much exposed, the disease appeared in the case of a young man, careless as to cleanliness. He had not suffered from it before, but had been looked upon as a healthy sailor, always fit for duty. There was a preliminary lassitude, the spirits fell, the pulse was slow, the appetite failed, and digestion was bad, while the gait became stiff and awkward. Then a dull pain was complained of in the sural muscles, and the tendons of the knee-joint became contracted. In the month of September, there were three other cases. Two of the patients became giddy on slight exertion, one had pains in the epigastrium, and the gums in all were swollen and livid; while in two there was a darker line following the closely alveolar edge about a line from the teeth, which in these patients were loose. The breath became more or less offensive in all. Bleeding from the gums took place at first on slight provocation, latterly without any immediate cause, and in one case there was epistaxis. The man who was decidedly most affected had formerly had the disease while in the Chinese waters, and his was the third case in order of occurrence on the present occasion. With him, dark spots appeared first on the muscular space between the tibiæ and the fibulæ of both legs, then on the thighs; those on the fore legs gradually coalescing into large patches of a dark colour, quite flabby under the touch.

In all, the treatment was very much cramped by the absence of fresh vegetables in sufficient quantity—the quantity of preserved ones being too small to meet the cases satisfactorily. Vinegar was served with the food, and lime-juice. Owing to the low state of the circulation in some, porter was added, with a result that encouraged its addition to the rest. The cases progressed favourably except two; in these, the weakness advanced, and they were carried ashore, where, on the restoration of fresh vegetables, they were quickly restored. In one of the milder cases, citric acid was tried at first; it was of little service alone, but seemed more useful when neutralised by bicarbonate of potash or soda.

In all the cases there had been the same deprivation of vegetable food as served from the ship's stores, although rice and oatmeal has been allowed as wanted. But as some carried private supplies, and as it was impossible to ascertain who took advantage of the unlimited supply of these articles or who did not, nothing can be rightly inferred from this as to the invasion of the disease. But a careful study of the circumstances of the crew antecedent to the outbreak showed that (in addition to the primary cause, the long deprivation of succulent vegetables) there were secondary elements deserving at least consideration. First among these secondary causes, then, the long duration of cold misty weather claims a place. The snow covering the floë became wet, the floë itself soft and rotten, with holes here and there into which the men were constantly slipping. All day long they were wet to the knees, nor did the severe exertions they underwent do anything more than weaken their already overtaxed constitutions; indeed, this

appeared to be an important secondary cause of the outbreak. The men became dejected. A state of languor succeeded, after which the development of the complaint was rapid. The state of lassitude itself I should class as a symptom of the disease—as a result, not a cause. At the same time, it should not be overlooked that want of proper exercise might induce a similar state.

THERAPEUTIC MEMORANDA.

ON THE USE OF SANTONIN IN EPILEPSY.

SANTONIN is stated by Mr. Spencer Wells to cause patients to see objects either yellow or green in colour; and this fact has been confirmed by Dr. Macnamara, and attributed to the production of some cerebral disturbance. In the following cases, I was led to administer santonin, thinking that the epilepsy depended upon the presence of lumbricus in the intestines. The stools were carefully examined, but no trace of the parasites could be discovered.

CASE I.—J. P., aged 10, about three years ago had an injury to one of his fingers; and, while under the treatment of a woman bone-setter, she tore off (the father of the child says) the nail before the proper time for its removal. As the finger became worse, the father placed him under the care of a surgeon and it rapidly healed. Immediately after this, he noticed his son to suffer from slight giddiness; sometimes, in walking, appeared as if asleep for a few seconds; in running, he had been seen to stop, and, after the attack had passed, start off again. When he came under my care, six months ago, the attacks were very frequent, longer, more severe, and following in quick succession, often several in an hour; he fell anywhere, and had, as a sequence of this, a large sloughy wound five inches long, following the course of the superior curved line of the occipital bone. I gave him bromide of potassium in increasing doses alone, and afterwards combined with belladonna and sulphate of zinc, but with no good effect. I then left off the bromide mixture and gave him a grain of santonin, increased to four grains daily, for a few weeks, with the result of a complete cure.

CASE II.—T. M., aged 19, miner, consulted me, suffering from muscular twitches in the extremities, with epileptic seizures, of four years' standing. The twitchings occurred several times daily, and more often in his sleep, with a fit once or twice a week, generally on rising in the morning. He took santonin in powder, five grains daily, with twenty-grain doses of bromide of potassium thrice daily, for a month, without any return of the convulsions, and the twitchings were much relieved. I then left off the santonin and doubled the dose of the bromide, with the result of two fits within the week, certainly modified, but still of marked character.

May not the evident cerebral disorder set up by the administration of santonin be in some measure curative of epilepsy, and something more than mere coincidence? I do not feel that the evidence is conclusive in so few cases; but it opens out a field for clinical research.

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INTERNAL ADMINISTRATION OF TAR IN PSORIASIS.

IN the JOURNAL of February 19th, Dr. R. H. Clay recorded two cases of psoriasis in which tar had been given internally unsuccessfully, but which were soon cured by the external use of the same drug. The following number of the JOURNAL contained letters from Dr. McCall Anderson and Mr. Balmanno Squire: the former confidently adhering to his previously expressed opinion, "that tar is sometimes successful after arsenic and other remedies have failed"; the latter pointing to the cases as supporting his statement, "that tar administered internally is not any assistance to outward tar in the treatment of psoriasis".

A few weeks later, March 10th, I was consulted by E. S., aged 23, with psoriasis inveterata of twelve months' standing. He stated that he had been treated by several medical men with little or no benefit, although he had taken arsenic in large doses for a considerable length of time. I therefore resolved to try tar internally without any external application, and commenced by giving him three grains of liquid pitch made into a pill with flour three times a day. On the 17th, he was ordered to take four pills daily. On the 24th, it was noted, that the eruption was, if anything, more extensive, but that the patches were not quite so elevated. I then gave him a confection composed of one part of liquid pitch and three parts of treacle. Of this he was directed to take a teaspoonful twice daily. At the end of a week, he began to take the same dose three times, and, in a fortnight, four times a day. The four doses, containing about sixty grains of the pitch, were not well borne, producing nausea and diarrhœa, so that it was necessary to omit the drug for several days, and then give it in smaller and less frequent doses. Nevertheless, the disease was rapidly declining, and by the middle of June had quite gone. As yet (November 29th) it has not reappeared.

REMARKS.—The above case serves to illustrate what I have frequently seen in Dr. McCall Anderson's practice, and if it do not show that tar administered internally assists the outward use of the same remedy in the treatment of psoriasis, it certainly proves that the disease will disappear under its internal use without any external application whatever.

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CLINICAL MEMORANDA.

THREE CASES OF INJURY TO NERVES.

SOME time since, a boy was brought to me who had, a day or two previously, received a severe blow from a stone over the right eye. The skin was contused in a small spot over the supraorbital foramen, and a large crop of vesicles had broken out on the forehead and scalp, all over the extensive area of distribution of the supraorbital nerve. This case is particularly interesting, when taken in connection with Dr. Broadbent's remarks on Herpes, in the JOURNAL of December 9th, and with the following case.

The second case is that of a labourer from one of Her Majesty's dockyards, who was under my care, at St. Mary's Hospital, two years ago. Three months previously, he had met with a severe wound of the front of the wrist from a piece of broken glass. A recent cicatrix existed over the inner side of the tendon of the flexor carpi radialis; and, on pressing the finger firmly over it—that is, against the median nerve—the patient complained of severe pain. There was impaired sensation over the anterior and outer aspect of the hand; and on the backs of the last phalanges of the outer fingers, including the radial side of the ring finger, sensation was almost completely obliterated. (Hilton on *Rest and Pain*, second edition, page 174). As the man said that he was improving, we advised no interference, although, in all probability, some small fragments of glass still lay against, or imbedded in, the nerve-trunk. While he was under observation, a copious eruption of small bullæ spread itself over the area of distribution of the median nerve in the hand. If injury to the nerves gave rise to these two conditions, herpes in the child, pemphigus in the adult, may not many of the pathological conditions of the skin which follow fracture of bones of the extremities be due to nerve-lesions?

The third case is that of a barman, who is now an out-patient of mine, suffering from abscesses on the inner side of the elbow. A year ago, he was treated for a similar affection at another hospital, when it was found necessary, he says, to make at different times no fewer than thirty incisions for the evacuation of abscesses. Many of the scars are even now clearly perceptible. One of them (rather a large one) lies over the inner side of the forearm, just below the elbow. Possibly, the gentleman who made the wound had satisfied himself that no large artery lay close by, and with the position of nerves he did not occupy himself. But, somehow or other, the unfortunate barman has now a wasting of the inner side of the forearm and of the muscles of the little finger. His metacarpal bones, now unsupported by interosseous muscles, stand up in sad relief, whilst nothing is to be found between the metacarpal bones of the thumb and of the index finger but a flabby web of tissue—a poor representative of the abductor indicis and the adductor pollicis. Sensation in the parts supplied by branches of the ulnar nerve is but slightly affected. Possibly these fibres escaped complete division. The man says that he suffers from "pins and needles" in the hand occasionally, and the skin is extensively chapped and fissured; but this latter condition obtains also in the unaffected hand, being due to the peculiarities of his trade.

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INCUBATION-PERIODS OF SMALL-POX AND VACCINATION.

THE following notes may possess some interest, as illustrating the article in the JOURNAL of December 2nd, on Fatal Cases of Small-Pox among Vaccinated Persons.

On Thursday, October 5th, 1876, I was called to see J. K., an