still very restless, with little abatement of the more prominent symptoms, except in the right arm, which could be moved more freely. The systolic murmur was unchanged, without dulness on percussion. Temperature, 101 deg.; pulse, 116. He had great thirst and profuse perspiration. He was ordered to continue the salicin, and to have potash-water *ad libitum*.

February 15th. He slept better last night. The pains in the joints were somewhat relieved, but were still very painful on motion, without any sensible difference in the swelling of the knee and ankle-joints. He could move the arms, which he was able to take from underneath the bed-clothes without assistance. The pain at the nape of the neck was still severe, but that in the heart had disappeared, though the systolic murmur was still audible. Temperature, 100 deg.; pulse, 112. The treatment was as before, omitting the poultices to the chest.

February 16th. He was much relieved this morning. The swelling and tenderness in the large joints were considerably abated. He could move both arms freely, and altogether felt surprised at the rapid improvement, being able to turn in bed with a little assistance. Temperature, 100 deg.; pulse, 108; bowels costive. He was ordered to have an ounce of castor-oil immediately. Chicken-soup was added to the diet, and linimentum opii was ordered to be rubbed into the affected joints morning and evening.

February 17th. There was marked improvement this morning. He could move both arms and legs freely, and was able to turn in bed without assistance. The pain in the head was gone, but there was still some stiffness in the neck. The systolic murmur was still audible—probably a permanent result of his former attack—but he felt no pain or inconvenience in the region of the heart. Temperature, 99 deg.; pulse, 96. The swelling in the joints was disappearing. A little brandy was ordered to be added to his potash-water, and diet to be increased by the addition of eggs and white fish. Convalescence having been now established, it need only be further remarked that he continued steadily to improve; was found sitting up in bed on the 20th without a vestige of pain anywhere, and resumed his occupation the last day of the month, on which date he also discontinued taking the salicin.

REMARKS.—Without entering into details, there is scarcely room for doubting that the favourable issue in this case was mainly due to the salicin, and that in it we possess a valuable therapeutic agent in this troublesome and mischievous disease.

RETROFLEXION OF THE VIRGIN UTERUS, WITH SEVERE AND ACUTE SYMPTOMS, IN A GIRL AGED 14.

By E. HOLLAND, M.D., M.R.C.P., F.R.C.S.,
Assistant-Physician to the Hospital for Women.

E. M., AGED 14, of scanty frame, with puberty advancing normally, and whose last menstruation had been somewhat profuse and attended with severe vomiting, failed, with symptoms very like the decided invasion of typhoid fever, about a week after the cessation of the flux. There were sharp pyrexia, dry brown tongue, frontal headache, and general abdominal tenderness. With these, however, there was pain of a peculiar character, severe, crampy, paroxysmal, and circumpelvic, and there was also "cutting" micturition. Poppy fomentations were ordered, with small doses of opium and acetate of ammonia; but the pain continued and was exaggerated. The mother observed that the pains were like those of labour, and came on every twenty minutes, doubling her up and occasioning wild cries of distress. At this stage, a vaginal examination disclosed retroflexion of the uterus, the retroflexed portion being hot and extremely tender; and restitution was at once effected by the sound. The paroxysmal pain did not again recur, and the next day found our patient cheerful, happy, and well.

COMMENTARY.—The case referred to occurred in private practice, in genteel life, and where its nature might have been readily overlooked or imperfectly investigated. Such cases, however, cannot be very common; for, in upwards of a thousand special cases treated by me in the Hospital for Women, I have not observed similar conditions in early puberty. It is highly probable that the flexion was occasioned by the vomiting and straining of the last period; that secretions accumulated owing to obstruction at the angle of flexion, the obstruction of flexion; and that the violent paroxysmal pains were dysmenorrhœal in character, and to be explained by an irritable uterus making futile efforts to disgorge its flooded interior. In any such case, I should advise a like procedure wherever circumstances admitted its being carried into execution.

ON A NEW FORM OF REMOVABLE PATTEN FOR SURGICAL OR GENERAL USE.

By RICHARD DAVY, F.R.C.S.,
Surgeon to the Westminster Hospital.

THERE are many working people, as well as rich, who are obliged to use a high boot for walking purposes. Hip-joint disease, fractured thighs, and arrest of development on one side, furnish examples.

I have never yet met with a cork boot that can withstand constant fair usage; the majority of them soon give way at the toe, and the cork laminæ are ground away.

From an æsthetic point of view, the steel patten is more graceful than the funereal-looking block of leather encasing the cork; for it is impossible to disguise seven by ten inches of black sole. By reason, also, of the inability of a patient to divest himself of the cork sole without taking off his boot, I have been led to invent the simple mechanism which is here engraved.

The boot should lace up high, fit well, be square in the toes, and low in the heel. The anterior elevations receive the sole at the welt; the posterior semicircle adapts itself around the heel, and a strong screw fixes the whole at the spur-box. The complete gear for a countryman, with seven inches of shortening, weighs under three pounds. The groundwork of the patten should be convex, to allow the swing of the body in progression; the patient himself being, as a rule, the best judge of the most fitting curve. I have as yet only three men wearing this mechanism, but they report very favourably on it; stating it to be convenient, clean, and serviceable. From a non-professional point of view, pattens have been going out since the introduction of goloshes; pattens are, however, yet worn in rural districts, as they were by Sairey Gamp in Pecksniff's cab; and I shall be pleased if some modification of this mechanism leads to the inducement of outdoor exercise on the part of women who object to soiled boots, wet feet, or slippery goloshes. Messrs. Blaise and Co., 67, St. James's, Street, S.W., are the mechanics.

TREATMENT OF SCABIES WITH THE FIXED OIL OF STAVESACRE.

By BALMANNO SQUIRE, M.B.,
Surgeon to the British Hospital for Diseases of the Skin.

I HAVE endeavoured in the pages of this JOURNAL to add to the number of such ascertained chief therapeutical constituents in the instance of chrysophanic acid as the active therapeutical principle of Goa powder. I now desire to make another addition in the case of the fixed oil of stavesacre. In the prosecution of an investigation as to the pathology of prurigo senilis, the details of which were published in this JOURNAL

some years since, I had occasion to employ an ointment of stavesacre-seeds, as a means of therapeutically testing the accuracy of my conclusions as to the pathology of that disease. This remedy, as is well known, is a parasiticide, in the sense that it is fatal to all of those animal parasites, properly so called, with which the human skin is wont to be infested in this country: that is to say the pediculus capitis, the pediculus corporis, the pediculus pubis, and the acarus scabiei. However, I have found that an ointment of stavesacre-seeds is a very coarse and unsightly preparation. On inquiring of those wholesale firms who undertake the business of "drug-grinding" for the general body of pharmacists, I ascertained that it was impossible to grind the seeds to any finer condition than that of a coarse meal, on account of their excessively oily nature. It then occurred to me that I could obtain a much more finely pulverised condition of the seeds by first removing their oil from them. This, for the purposes of my experiment, was accomplished by percolating the bruised seeds with ether—a process which completely abstracted the oil. The seeds could then, as I found, be readily ground to a very fine powder, and a very smooth and excellent looking ointment was thus obtained; but, on making trial of it, I found that my ointment thus prepared had lost all its virtue as a parasiticide. It therefore became probable that the virtue of stavesacre-seeds was contained in their fixed oil. On making trial of ointment made with this oil, I found that such indeed was the case. Now this oil may be obtained much more cheaply than by the method I employed; namely, by simply expressing it from the seeds in the same manner that linseed-oil is commonly obtained from linseed. The fixed oil of stavesacre is quite colourless. It is also odourless, and so is a very unexceptionable remedy. Ointment of stavesacre-seeds has been obtained by digesting the bruised seeds in hot lard, and then straining the admixture; but this produces a strongly coloured brown ointment, whereas an ointment prepared with the fixed oil is perfectly colourless. The absence of smell and colour in an ointment so prepared gives it considerable advantages over sulphur-ointment in the treatment of scabies, if only its efficacy be the same; and I find it to be quite equally efficacious, but it possesses also another considerable advantage. It is well known that in the treatment of scabies by sulphur it is necessary to beware of the remedy as much as of the disease. The strongly stimulating action of sulphur-ointment sets up in many persons a persistent dermatitis of a very irritating kind, which is remarkably slow to subside, and which constitutes a condition rendering it very difficult for many practitioners to determine how far the persistent itching is due to the natural disease and how much to the artificial one. Now an ointment of the fixed oil of stavesacre, besides being colourless and odourless, is also non-irritant. By this I do not mean that it will not serve as an irritant to exceptionally sensitive skins, but that its irritating effects are vastly less in degree than those of sulphur-ointment, and that in the majority of cases it does not irritate in the least. I will adduce a case in illustration of my views.

A man, aged 21, recently admitted as an in-patient of the British Hospital for Diseases of the Skin, under my care, had been sent up by Dr. Moger of Carshalton, affected with a copious pustular eruption of his hands and upper limbs. His hands, forearms, and arms were so brawny and swollen with their inflamed condition that he could scarcely bend them, and was unable to take off his coat unassisted. He complained only of his hands and arms, and at first said that there was nothing else the matter with him; but, on stripping him, slight scratch marks were visible on different parts of the trunk and lower limbs, but no other notable kind of eruption; and on questioning him, he confessed to a general itchiness of a moderate kind. On close examination of his hands, several of the characteristic furrows of the acarus were discernible, and from one of these an acarus was extracted on the point of a pin, and placed under the microscope. He had been affected with his complaint for about six weeks. He was ordered to rub in over the whole of his skin excepting his scalp and face, an ointment containing one drachm of the fixed oil of stavesacre to an ounce of lard. This he continued to do every morning and evening for nine days. He was then dismissed completely cured. No other treatment of any kind was employed. On the third day of his treatment, he began to lose his itching. On the fourth day of treatment, there was no more itching. At the time of his dismissal, the pustular eruption, and the swelling and inflammation of his hands and upper limbs, had completely subsided, so that he could use his hands freely and with ease. Nothing more remained of the original condition beyond comparatively faint and slightly livid red stains, the traces of the considerable eruption which had recently existed.

The frequent and thorough applications of the ointment had throughout occasioned him no irritation or smarting in even the least degree, and on no part of the skin could any trace be perceived of any irritant action of the ointment.

THE GERM-THEORY OF ENTERIC FEVER.*

By ROBERT S. HUDSON, M.D., Redruth.

Few districts are more favourably situated for the study of infectious diseases than the peninsula corresponding to West Cornwall. The main lines of traffic, whether by road or rail, may be said to converge at Truro. There is little cross-country commerce, except in the neighbourhood of mines; and the sea, which surrounds the district to the greater part of its extent, forms an effectual barrier to the admission of any contagium, unless at Falmouth, Penzance, St. Ives, Hayle, and a few of the minor ports. The course of any infectious disease arising from without might, therefore, readily be traced by proper sanitary organisation; and, at little expense, the whole district might be as free from epidemic disease as were the Scilly Islands during the ten years 1851 to 1860, when not a single death was reported from small-pox, scarlet fever, measles, or diphtheria. The mortality is very low in the country districts, and I believe there is no part of England where the soil and climatic conditions are more conducive to health and longevity; but our towns and villages, with their dense populations, are so prejudicial to health as to make the total death-rate of the Truro, Redruth, Penzance, and Falmouth Unions higher than any districts in the five South-Western Counties, with the exception of Plymouth, Exeter, East Stonehouse, and Bath.

It is my purpose, however, to confine my remarks to the etiology of one of these infectious diseases: that fever variously named typhoid, enteric, or pythogenic; and to explain why I have been converted to a belief in the germ-theory of its causation.

When I was a student, preparing for examination and getting up the differences between typhus and typhoid, certain ideas were acquired, which I carried with me into practice; for example—typhus: highly contagious, doctors and nurses frequently catch it; typhoid: non-contagious; if two people are ill in the same house, there is a common cause. I was accustomed to look on Dr. Murchison as infallible on all questions appertaining to fever, and was convinced that the term pythogenic—begotten of filth—was a great step in the attainment of a correct nosology.

I should state that in Redruth typhoid is a rare visitor, and is never epidemic; most of the persons attacked have recently visited neighbouring towns. We have no common system of sewers with which our water-closets are attached; there is, therefore, little opportunity for the contagium to spread, if it exist in the discharges of the patient; whereas the country districts around the town, whose inhabitants obtain their drinking-water from shallow wells or adits, provide an annual supply of typhoid cases; but it is an interesting fact that these cases crop up in the same spots year after year, whereas other parts of the country are as free of typhoid as is Redruth itself.

I well remember a commercial traveller, whom I attended in 1873 for typhoid; he had been staying at various Cornish towns during the week preceding the initial shiver. His wife came from Birmingham to nurse him, and one of the housemaids at the hotel was appointed to wait solely on them. Every care was seemingly taken in the disinfection of stools and vessels, yet this housemaid contracted the disease, and had a genuine attack after his convalescence and return to Birmingham. I must say this case staggered me, and I could only explain it on the supposition that contagium from the discharges had not been deprived by the disinfectants of their vital power. This contagium was volatile, mixed with the air, and she had inhaled some when performing the necessary duties of cleansing. He consulted me on the day of his arrival at Redruth, so, unless the incubative period can be compressed into a few hours, it is clear that there could not have been a common cause at work. As a further proof that it did not originate in Redruth, I may add that no other person in the hotel was attacked.

In November and December 1874, Portreath—a village on the north coast, four miles from Redruth—was visited by an outbreak of typhoid fever. A girl named N. had been in service in Truro; after the death of her mistress from typhoid, she felt unwell, and wished to return home; becoming worse, she placed herself under the care of Mr. T. S. Reed of Pool. On the twentieth day after her return, her sister shivered and suffered in a similar way. A family named S. lived next door, and two daughters of the house were seized with fever; and Mr. Reed tells me that these four had gastric irritation, spots, ochre stools, and tardy convalescence. Next door to S., a boy named R. was then attacked; he was under the care of Mr. J. S. Hichens of Redruth, and had troublesome hæmorrhage from the bowels with delirium. S. had a married son, living on the other side of the village;

* Read before the South Devon and Cornwall Branch.