the pustular condition of the skin had quite disappeared. In this case there were two sources of irritation, each necessitating a different mode of treatment.

CASE III.—Pruritus: Leucorrhaa. Pregnancy.—R. M., aged 28, married six years, mother of three children, now three months advanced in her fourth pregnancy, complained of constant irritation in her privates, together with leucorrhoeal discharge, at times coloured. bowels were constipated. On examination, the os uteri was found to be very granular, the vagina bathed with mucopurulent secretion. application of nitrate of silver to the os, and the employment of a lotion consisting of dilute solution of acetate of lead, with glycerine of borax, succeeded perfectly in relieving the discomfort. A mixture of sulphates of magnesia and of iron was prescribed, to obviate the constipation. Cases of this disorder are very frequent during the early months of pregnancy, and occasion much distress. A careful examination and detection of the cause is the only method of dealing successfully with them; and, simple as this may seem, it is too often neglected.

CASE IV. -Pruritus: Diabetes.-D. J., aged 49, married thirty years, mother of twelve children, about two years ago had some skin-disease, which lasted over a twelvemonth. Since then she had lost flesh; she had no appetite, and was consumed with thirst, which nothing seemed to quench. The bowels were confined, the motions were hard and dry. Micturition was frequent; the urine was profuse in quantity, and she had to get up several times in the night to pass it. She had much irritation in the privates, which were sore and irritable, occasioning much distress. On examination, the vulva and surrounding parts were found to be red and irritable, the skin indurated, and covered with small pustules. The uterus was normal. From the history given, diabetes was suspected, and the urine drawn off and examined. It was clear, of a light amber colour, specific gravity 1034; and on boiling it with liquor potasse and solution of copper, the usual indications of presence of sugar were very marked. A strong solution of nitrate of silver (a scruple to a drachm), was painted over the inflamed surface of the vulva; a lotion consisting of acetate of lead and glycerine of borax, was ordered; and tartrate of potash was prescribed, with the view of relieving the excessive thirst. It was found that the average quantity of urine during the twenty-four hours exceeded ten pints. The application afforded much relief to the irritation; but, as the diabetes was in all probability the occasioning cause, she was referred to a general hospital, and thus passed from observation. She had previously been doctoring for several months, without the nature of her complaint having been suspected.

CASE v. Pruritus: Constipation.—S. C., aged 45, married twenty-seven years, mother of eleven children, had suffered for several months from violent irritation and burning smarting pain in the anal region. The bowels were very confined. On examination, the skin round the anus was found to be indurated and very irritable. No fissure or hæmorrhoids existed. No uterine mischief was detected. A mixture of sulphate of magnesia and sulphate of iron was prescribed, also a lotion of alum and glycerine of borax. Suppositories of extract of belladonna were ordered to be used every night, at bed-time. Within a fortnight, the symptoms had materially abated, the bowels acting regularly, and the patient sleeping comfortably, not being kept awake, as formerly, by the distressing irritation. Perseverance with the above remedies for another fortnight effectually removed the discomfort; and the patient has had no recurrence of it during the last three months.

CASE VI. Pruritus: Herpes.—H. E., aged 47, married eighteen years, without children, complained of "intense itching in the privates, which increased considerably when she got warm in bed." It had been present for the last three years, and had resisted all treatment. On examination, the flexures of the groin and the vulvar outlet were found to be very inflamed. The skin was red, dry, and irritable. The pubes was covered with small vesicles, some of which had become pustular. On examining with a lens, no trace of pediculi or acari could be detected; the fact of the pruritus having existed for three years, and its not having extended to other parts of the body, were also against the supposition of scabies. There was no uterine disorder or vaginal discharge. A strong ethereal solution of nitrate of silver (gr. xl to 3i) was painted carefully over the pubic portion, and the mercurial ointment ordered to be well rubbed in over the inflamed surface. A mixture of bromide of potassium and sulphate of magnesia in infusion of gentian was also prescribed. On presenting herself the following week, she stated that she was better than she had been for the last two years. The solution of nitrate of silver was again applied, and the use of the ointment persevered with. A fortnight from this time, she reported herself perfectly well. The skin looked healthy, and there was no longer any trace of vesicles or pustules. Two months subsequently, she returned with a slight relapse, small herpetic vesicles being very distinct. A repetition of the application again relieved the discomfort; from her not being able to attend regularly, it continued more or less for several weeks, but she ultimately quite recovered.

The following, though not a hospital case, is worthy of record. CASE VII. Pruritus: Pediculi Pubis.—The patient, M. L., aged 21, was single. Her mother requested me to see her daughter, as she had for some weeks past complained of intolerable itching in the pubic region, which had gradually extended down to the calves of the legs. It produced such an amount of distress that sleep was almost impossible, and precluded her going into society from the uncontrollable desire to allay the irritation by friction. She was particularly neat and cleanly in her person, had no leucorrhea, and was far above any suspicion of pediculi or any venereal disorder, being a lady in every sense of the word. Not wishing to subject her to the distress of a pudendal examination, I requested permission to inspect the legs, which presented evident traces of much irritation, more especially along the inner surfaces of the tibiæ, where the skin was covered with hair; beyond the appearance of numerous small blood-stained points, no rash was detected. On examining more closely with a pocket magnifying glass, I discovered several specimens of the pediculus ferox, or crab-louse, closely attached to the shafts of the hairs, and, as usual, evincing no disposition to let go their hold. The only explanation she could give as to their presence was having caught them from a closet at a confectioner's. A warm bath and the employment of Hendrie's soap, with a lotion composed of perchloride of mercury gr. xvi, rectified spirit 3ii, and rose water zviii, soon allayed the irritation, the spirit serving to dissolve the nits. The use of the lotion was persevered with for a few days to avoid any relapse, although the itching ceased after the first few applications.

REVIEWS AND NOTICES.

THE CONTINUED FEVERS OF GREAT BRITAIN.*

A SECOND edition of Dr. Murchison's work requires no commendation from us. It remains what it was on its first appearance, by far the best exposition of the subject of which it treats. We propose merely to consider one or two points upon which there is still some difference of opinion in the profession.

First, with regard to the use of stimulants in fever: it is to be regretted that no sufficiently accurate investigations have been made on the value of alcohol in fever. It is employed, we believe, by most medical men on the popular ground that it is strengthening, and not on the ground of accurate clinical observation. The quantity of alcohol required in any particular case of fever depends so much upon previous habits and individual peculiarities that it is almost, indeed we might say wholly, impossible to lay down a general rule; but when Dr. Murchison says that "it is very rarely necessary to give more than eight ounces of brandy at any period of the fever," we think he suggests a general rule which, in a large number of cases, would be inapplicable. Farther on he says, "occasionally this allowance may be exceeded, but the cases are very exceptional in which it is necessary to give more than twelve ounces in twenty-four hours." Now twelve ounces are about four or at most four and a half glasses, and a large number of persons north of the Tyne, at least, are in the habit of consuming daily quite that quantity, if, indeed, not more. And in England a considerable quantity of alcohol is consumed in health in the shape of beer and wine; we believe, indeed, to such an extent, that eight ounces of brandy would be to many no stimulation at all. No doubt Dr. Murchison's opinion on this matter is greatly influenced by his belief that alcohol is rather a medicine than a food—"more allied in its action to opium and quinine than to milk and beef-tea." Much depends here upon what is meant by food. This has, in our opinion, been stated in the most practical manner by Dr. Buchanan in his article on Typhus in Reynolds's System of Medicine. He says, speaking of alcohol: "With food in its widest sense, as what keeps up the vital functions, the physician will have little hesitation in classing alcohol who has observed the common case of an habitual tippler maintaining for years a fair standard of bodily health upon a quantity of other nutriment wholly insufficient by itself to maintain such health. And to such a case a fever patient offers some resemblance. He, too, may not be able to take enough of other food to maintain him, but alcoholic drinks will help him not to starve. And thus the writer judges them to have a food value apart from their medicinal action" (vol. i, p. 451). We believe that this expresses the truth as accurately for practical purposes as is needful, and that it harmonises with daily

^{*} A Treatise on the Continued Fevers of Great Britain. By Chades Murchison, M.D., LL.D., F.R.S., Physician to St. Thomas's Hospital, etc.

experience. For any one may prove to himself that severe exertion may be maintained for a considerable time upon alcohol alone; that feelings of exhaustion are rapidly relieved by alcoholic stimulants; and that when from fatigue, loss of appetite or any other cause, food cannot be taken, alcoholic stimulants will for some time supply their place. Whilst believing with Dr. Murchison that alcohol in typhus is, as a rule, unnecessary under twenty years of age, we venture to think that he has not sufficiently estimated its "food value", and that he has stated far too low the quantity of alcohol necessary in many cases of typhus. In enteric fever, on the other hand, with its slow convalescence, and the great danger of giving solid food when patients are urgently craving for it, we believe a liberal supply of stimulants indispensable. That alcoholic stimulants are sometimes given unnecessarily, and sometimes simply because the practitioner does not know what else to do, there cannot be much doubt; but for the purpose of producing sleep, relieving the feelings of exhaustion and the mental depression common in fever, and for helping on the appetite during convalescence, we think that there is no remedy equal to alcohol.

The employment of laxatives or purgatives in enteric fever has long been the subject of dispute. In this country the best authorities have condemned them, but the opposite practice has the support of Louis, Andral, Bretonneau, Trousseau, Niemeyer, Wunderlich, and numerous others. Speaking of the treatment of M. de Larroque, which Dr. Murchison tells us was long famous in Paris, Louis says: "If the preceding facts, even those collected and commented on by M. de Larroque, do not enable us to arrive at a rigorous conclusion as to the superiority of evacuants in the treatment of the typhoid affection, we must all acknowledge (for nothing is clearer) that these agents do not produce the injurious effects on the progress and the issue of the disease which have for a long time been attributed to them; that they may be administered without fear, and that it is very probable that these agents are superior to other therapeutic measures. (De Fièvre Typhoïde, tome ii, p. 442.) This purgative or laxative treatment is founded upon the elimination theory, and on the supposition that the cerebral symptoms are due to the absorption of putrid substances from the intestine. If this were true, then cerebral symptoms would be most common in those cases in which the bowels might be said to be bound, which, unfortunately for the theory, they are not. A mild attack of enteric fever is almost invariably associated with quiet or at least moderately loose bowels, and a severe attack is almost as invariably associated with the contrary condition. Cerebral and other dangerous symptoms are associated with diarrhea, not with constipation. The physician who recommends laxatives to a patient with an acutely inflamed and ulcerated intestine, appears to us to be about as discreet as would he be who should recommend a course of gymnastics in acute rheumatic fever, or walking exercise to one suffering from a paroxysm of the gout. We are glad to find, therefore, that Dr. Murchison gives the weight of his great authority in condemnation of this dangerous practice. He says, "Diarrhoa is not a process of elimination to be encouraged. The most urgent diarrhea often co-exists with great tympanites and the most severe cerebral symptoms, and is very apt to be followed by hæmorrhage or perforation: the danger, in fact, is in direct proportion to the severity and duration of diarrhea." It is not here contended, nor does Dr. Murchison contend, that the use of mild laxatives is never justifiable. On the contrary, Dr. Murchison recommends, when there is constipation at the commencement of the fever, "a small dose of castor oil or of rhubarb in peppermint water; and when the bowels are confined at a later stage, Dr. Murchison says: "I am in the habit of prescribing, every second or third day, one or two teaspoonfuls of castor-oil, or a simple enema." We believe this to be the most rational practice, and, in our experience, we have never had occasion to deviate from it. Speaking from a not inconsiderable hospital experienc, we take leave to recommend very great caution in the use of laxatives in enteric fever; and with regard to stronger remedies, such as jalap, colocynth, etc., we commend the saying of Baglivi-"Fuge purgantia tanquam pestem."

Of the cold bath treatment Dr. Murchison speaks, on the whole, favourably but cautiously. We believe that this method of treatment deserves investigation, and we wish that physicians of Dr. Murchison's ability and experience would devote some attention to the matter. We have employed it in some cases of enteric and typhus fevers, and have come to the conclusion that it is an useful therapeutic agent. It lowers temperature safely, produces a feeling of comfort in the patient, and very often sound sleep when sleep previously has not been had for days. That its use reduces the mortality of enteric fever to 3 or 4 per cent., as some German writers maintain, we do not believe; nor do we believe, as one might conclude from German writers, that

the cold bath is a remedy suitable for almost all cases indiscriminately. From our experience we should say that it is a remedy unnecessary in many cases, useful in some, and injurious in others. When Brand, of Stettin, and others, say that they have never lost a case in which they have been enabled to employ the cold bath in time, we are reminded of the saying of Louis—"Que l'expérience apprend tous les jours, que les grands succès en thérapeutique tiennent trop souvent à des erreurs de diagnostic."

souvent à des erreurs de diagnostic.' Dr. Murchison gives two cases of the co-existence of typhus and enteric fevers; and he says that "almost any two of the diseases which are believed to spring from different specific poisons" may exist in the system at one and the same time. This is not the place to enter into the consideration of this subject generally, and we shall therefore limit our remarks to the evidence which Dr. Murchison adduces as to the co-existence of typhus and enteric. It is with very considerable hesitation that we venture to dissent from Dr. Murchison on his own ground; but to our minds cases 88, 89 and 90 (pp. 664-5) do not establish the fact of the co-existence of the two fevers. We are of opinion that on January 30th, Henry W- (case 89), had been for several days, say four or five, well of the enteric fever; for the note on that day (about the twenty-fifth day from the commencement of the attack) says, "the patient complained of chills, the headache returned, and the tongue, which a few days before had been clean and moist, became coated. The pulse, which for several days had never exceeded seventy-two, rose to eighty-six." Now twenty-one days is the duration of a large number of cases of enteric fever, so that, assuming the patient's statement to be correct (which is possibly wrong, very few enteric fever patients being able to fix the commencement of their illness to a day), there is yet an interval of about three clear days during which, according to the note, there were the symptoms of health, a normal pulse and a moist tongue. It is not until three days after the patient has passed through an attack of enteric fever of twenty-one days' duration that the symptoms of typhus appear and pass through the ordinary course. To our mind, this is sequence, not co-existence. No doubt the typhus poison co-existed with the disease enteric fever, but there is in our opinion no evidence that the disease typhus existed along with the disease enteric. In case 88, too much confidence appears to have been placed upon the eruption; and we believe that many cases of so-called co-existence of specific fevers are due to a diagnosis chiefly founded on eruptions, in our opinion by themselves most misleading and untrustworthy. Malignant typhus fever and malignant scarlet fever were not unfrequently reported during the recent small-pox epidemic as occurring side by side with small-pox in cases which, we have ample reason for believing, were instances of variola hæmorrhagica. During the small-pox epidemic, a medical man wrote from a village in the country that he had had several cases of small-pox, and curiously enough, as he thought, a case of purpuric or petechial typhus. Those who have had much experience of small-pox and typhus will readily believe that the purpuric typhus was variola hæmorrhagica. Similar instances are not uncommon. It occurred to us once in hospital to see an eruption exactly like typhus appear in a man who was just recovering from enteric fever. The ward in which this man lay adjoined the typhus ward, and the eruption was so indistinguishable from typhus eruption (which was well known in the hospital, there being numerous cases of that disease in its proper wards), that the physician and the residents concurred in diagnosing typhus caught in the hospital, and the patient was ordered removal to the typhus ward. The eruption disappeared in two days, and, no other symptom of typhus appearing, the man was transferred back to the enteric ward. We do not suggest that Dr. Murchison would make mistakes of this kind, but we do think that these cases suggest caution in trusting much to eruptions in diagnosis. To Dr. Murchison's 90th case we do not refer, as Dr. Murchison himself thinks it doubtful. Between the years 1862.70, there were admitted into the London Fever Hospital 18,144 cases of typhus and enteric fevers, and in only two instances, and these, says Dr. Murchison, very doubtful ones, was there any suspicion of the two fevers co-existing. This being the experience of an observer like Dr. Murchison, we shall hesitate to accept the confident assertions of less competent and less experienced mer.

PISCICULTURE.—The great advances in pisciculture are due very much to the study of medical naturalists, amongst whom M. Coste and Mr. F. Buckland are prominent. A New Zealand correspondent writes that, thanks to the care bestowed upon its shipment by Mr. Youl, the import of salmon ova to the colony is apparently successful. The shipment was divided between the provinces of Otago and Canterbury, and by the latest intelligence a considerable number of fish have been hatched in the breeding ponds of both places,