with the skull is well heard in the left ear, and increased by closure of the meatus. He thinks he can hear it in the right ear, but it is not increased by closing the meatus. He has continuous tinnitus in the right ear. When at his best, the noise is like a "dull buzzing"; but, if his stomach be deranged, or if overworked, the sound rises to a persistent hissing, "like an engine". It is greater for some hours before an attack of giddiness, but is not louder at the moment of an attack. His first attack was one of sudden and profound loss of consciousness, without much giddiness. He was walking in the City, when he suddenly lost consciousness and fell. He probably had no convulsion, but was taken to a hospital, where he was thought to be in a state of post-epileptic coma. Some hours passed before he recovered consciousness. The second attack, however, was attended with vomiting and no loss of consciousness.

But the cases are rare in which the loss of consciousness is so considerable and so lasting as to render the diagnosis a matter of real difficulty. A speedy return of consciousness, coupled with the persistence of vertigo and the absence of any symptoms of local weakness, generally renders the nature of a case sufficiently obvious. The history of preceding attacks will also indicate the nature of the affection. In a first attack, as in one depending on an acute inflammation of the semicircular canals, a diagnosis might be for a time impossible.

[To be concluded.]

ON BLAPS MORTISAGA AS A HUMAN PARASITE.

By T. SPENCER COBBOLD, M.D., F.R.S.,

Correspondent of the Academy of Sciences of Philadelphia.

THROUGH the kindness of Mr. J. Fletcher Horne of Barnsley, I am possessed of a living specimen of the larva of this somewhat repulsive coleopterous insect, commonly known as the churchyard beetle. In a letter accompanying the specimen, and dated February 3rd, Mr. Horne says: "The enclosed was this morning found in the motions of a child eleven weeks old. As it is, I believe, an unusual visitor in a child so young, I have thought that it might be of some interest to you. The child has been brought up with cow's milk, always boiled". On receiving the maggot, which I at once recognised as referable to the genus *blaps*, I wrote to Mr. Horne requesting him to make inquiries with the view of ascertaining the genuineness of the case regarded as one of parasitism. Replying to me on the 6th, he writes: "I have seen the mother of the child to-day, and have not been able to shake the evidence that the larva was passed from the bowel. The people have no garden, and they feel sure that the maggot passed into the napkin with the motion. Their washing is done at home, and dried before the fire. The child is apparently getting well rapidly, which I think strengthens the evidence."

Mr. Horne having been apprised of my desire to publish the case, he was good enough, in a subsequent communication, to mention some other particulars. Thus, in respect of the symptoms, it was noticed that the child had a cough soon after birth, and for five weeks previously to the time that it came under his professional care it "had a fit once a week", apparently convulsive in character, as the face was said to have turned blue during the paroxysms. "A neighbour says she detected, before the worm came away, a 'humming or buzzing' about an inch from the umbilicus on each side, which has now gone away." I may here remark that I agree with Mr. Horne in thinking that these supposed insect-like sounds were merely due to flatus; our informant probably using the term "buzzing" only because she had knowledge of the fact of an insect having been passed. Be that as it may, Mr. Horne adds: "The child has never had any diarrhoea, and its bowels are usually constipated, the motions being passed in small round pieces like little marbles. When I first saw the child, it had great difficulty in breathing, with frequent sighing. To-day (the 8th) the child seems to be getting on famously." In an earlier letter, Mr. Horne informed me that the treatment mainly consisted in the administration of powders containing hydrargyrum cum cretâ and rhubarb; and, although they were not given with the view of expelling the parasite (the presence of which was of course not so much as suspected), they nevertheless had acted anthelmintically.

Taken by themselves, the above particulars might hardly perhaps be considered as affording sufficient evidence of parasitism, or of having caused the symptoms in question. However, several authentic instances of the occurrence of the larvæ of *Blaps* having now been placed on record, it is clear that, even if this case were more than doubtfully genuine, it would not set aside the evidence afforded in the other and otherwise similar instances. For my-elf, no doubt remains respecting the parasitism in this case; Mr. Horne's opinion and my own being in entire agreement.

In my general treatise on the *Entozoa*, I have briefly alluded to the notorious and unquestionably genuine case of Mary Riordan, who not only passed *per anum* upwards of 1,200 larvæ, but also several perfect insects belonging to this species. I have likewise referred to Hope's Catalogue, wherein two other cases are given. The first-named case was reported by Pickells and Thomson, with the valuable co-operation of the well-known Dublin helminthologist Dr. Bellingham. One of the other authentic cases, in which only a few larvæ were present, was recorded by Patterson of Belfast, and the third by Bateman. I may mention that the Rev. F. W. Hope's Catalogue originally appeared in the *Transactions of the Entomological Society*, being afterwards published in the pages of the *London Medical Gazette* (1837). Patterson's case was also, I believe, first communicated to the Entomological Society. I mention this in order to show the difficulty of getting at the literature of this department of helminthology (if such it may be called), and also in the view of expressing my belief that several other recorded cases might be found, if diligently sought for, in the *Transactions of foreign societies*. The only other instance that I can at present find ready to hand is the one for which Sir J. Rose Cormack is responsible. A notice of this case appeared in the *Monthly Journal of Medical Science* (1841).

As regards the mode in which the maggot gained access to the child in the case before us, it is not easy to decide; but, in the case of Riordan the mode of ingress was sufficiently explained. The *Blapsidæ*, as a family, are closely allied to the meal-worms, and, like most of the *Tenebrionidæ*, are black and foul-smelling beetles, frequenting dark and damp situations, from which they retreat only at night. The family comprises numerous species, of which probably not more than three are found in this country. They are abundant in Africa, especially in Egypt, where (according to Fabricius, as quoted by Westwood, Figuer, and other entomologists) the women eat *Blaps sulcata* cooked with butter, in order to make them grow fat. The insects are also employed as specifics against ear-ache and the bite of the scorpion—a method of treatment which smacks somewhat of the principle of *similia similibus curantur*, since earache, amongst the superstitious, is often associated with the notion of there being maggots within the meatus. Moreover, many genuine cases of insect-larvæ within the external auditory passages have been published. The superstitious notion of a "charm" is generally at the bottom of all domestic theories on the subject of treatment. This was pre-eminently so in Riordan's case. Here, as Westwood observes, when epitomising Pickells's long account, the parasites "probably originated in an absurd and superstitious practice, which she had for some time followed, of drinking daily for a certain time a quantity of water mixed with clay, taken from the graves of two Catholic priests, and eating large pieces of chalk. One of these beetles was immersed repeatedly in spirits of wine, but revived after remaining therein all night, and afterwards lived three years".

The intolerance of light shown by the perfect insect seems to be equally shared by the larva. Of this fact I have had repeated evidence by observing the behaviour of the living specimen sent by Mr. Horne. Thus, when, on February 5th, I placed the maggot on the surface of some moist mould (taken from a fern-jar and put in a tin box), scarcely half a minute elapsed before it commenced to bore its way downwards, and in less than a minute all but the tip of the tail had disappeared. In like manner when, on the 7th, I raised the lid of the box, and found the maggot lying on the surface of the soil, it almost instantly proceeded to bury itself. In short, under similar conditions, its conduct is invariably the same; and, whether we speak of it as a larva or an imago, this insect may clearly be branded as "one that loveth darkness rather than light". At the risk of incurring the wrath of a certain society established for the prevention of cruelty to animals, I occasionally, for the benefit of the curious, poke up my *Blaps mortisaga*, when—judging by the alacrity it displays in its frantic efforts to escape—its discomfort, not to say distress, is sufficiently obvious.

NON-ERUPTIVE VARIOLA.

By ALFRED FLEISCHMANN, M.R.C.S. Eng.

IN the fourth edition of Watson's *Principles and Practice of Physic*, pp. 861 *et seq.*, will be found the following paragraphs.

"This frightful disease sets in with smart febrile symptoms..... pain in the epigastrium, with nausea and vomiting, and headache."The period of incubation is from ten days to a fortnight..... Amongst other symptoms, "vomiting is one, pain in the back another. Heberden noticed that acute pain in the loins was almost always fol-

lowed by a severe attack; that pain higher up between the shoulders was of better augury; and that it was to be reckoned in all cases a good sign if there were no pain in the back at all". Again, "its severity, in truth, is almost always in direct relation to the quantity of the eruption.".....It is "accompanied by sore throat; the tonsils and fauces are tumid and red; and with this sore throat there is associated.....more or less salivation, which lasts for several days. At first, the discharge is thin and plentiful; but, towards the period of maturation, it often becomes viscid and ropy, and is with difficulty got rid of by the patient. This salivation is of some importance as a prognostic symptom."....."Besides this, Sydenham regarded the ptyalism as a diagnostic circumstance; as a mark which, identified with true small-pox, a fever called by him the variolous fever; the *variole sine variolis* of De Haen and others."....."Notwithstanding this statement", says Watson, "it is difficult to believe that any such disorder as 'variole sine variolis' ever proceeds from the contagion of small-pox.".....And once again, Watson says, "this affection of the salivary glands does not so often occur in children, but diarrhoea appears sometimes to take its place." (All the italics, except those in the penultimate sentence, are those of Sir Thomas Watson.)

In such a disease as small-pox, I do not think I need apologise for not quoting a more recent text-book. At any rate, I could not quote from a more accurate, painstaking, or classical authority; and even if it were at hand, which it is not, I doubt whether a better diagnostic summary is extant.

Last January, a dressmaker brought to my wife a piece of silk which she wished her to purchase; and, in the course of conversation, mentioned, with that utter *sang froid* characteristic of the Italians in all sanitary matters, that the reason why she wished to dispose of it was, that it belonged to one of her customers whose husband had died of small-pox between its purchase and conversion into an evening dress, and, therefore, the lady had commissioned her dressmaker to dispose of it, as it was unsuitable wear for a widow.

On coming home, this domestic transaction was related to me, and I at once directed my servant to take back the piece of silk to the dressmaker, and, knowing that small-pox was at the time rather endemic in Florence, I at once revaccinated my servant, who was the only member of the family about whose protective condition I was not fully assured. The vaccination "took", as revaccinations generally do, that is to say, it was not a virgin vesicle, but caused considerable local irritation. Exactly fourteen days after the revaccination, she came home from a "festa" complaining of great pain in her back, was violently sick, and very feverish, and, about three or four days afterwards, she called my attention to an eruption on the back of her neck, chin, and lower extremities. On examination, there was not much doubt in my mind (certainly there is no doubt now) that they were true but ill developed small-pox pustules. She continued sick and sorry for a few days, yet quite able and willing to continue her work as usual. About a fortnight after this, one morning my wife said to me, "I have such a sore throat, and such a disagreeable smell in my throat, like drains". On questioning and examination, I found she complained also of a sharp pain between the shoulders, the fauces were red and slightly tumid, with no ulceration or eruption, but well marked pyrexia. On passing from my bedroom to my dressing-room, I had to pass through my son's room (a boy of twelve), and I was greeted with the very same series of complaints. "Papa! I have such a nasty smell in my throat," etc. Both mother and son continued to complain for some three or four days of the same symptoms, but, to the former was added intense salivation, so great and so much that, for two nights, she had to go to bed with a large handkerchief between her head and the pillow, which in the morning was saturated; and during the same period, and added to the foetor and salivation, there was an abundant collection of viscid secretion about the tonsils, which could be pressed out by the fingers, and was difficult to remove even by gargling. The latter was seized with sharp diarrhoea and vomiting, but suffered slightly only from morbid secretion from the salivary and tonsillar glands.

To-day I have heard that, upon the dressmaker receiving back the silk she had brought us for sale, not being able to dispose of it, and her daughter wanting a wedding garment, she bought the stuff herself from the Italian lady to whom it had originally belonged, and she and her daughter were busily engaged in "making it up", when, two days before the wedding, the bride-elect was taken seriously ill, and is now at the point of death from confluent small-pox.

On hearing this, the true sequence of the chain of facts now narrated flashed across my mind; and it would have done so, I think, before, but, as I must honestly confess, I did not know, or had forgotten, that sore throat and salivation are diagnostic of variola; nor do I now know, nor does Watson mention, that the smell or taste

(whichever it can be called) of drains—in other words, subjective foetor of the fauces—is also diagnostic. Is it? Again, if it were wanted, no stronger evidence could be given of the protective power of cow-pox, not indeed against small-pox, but against the serious and fatal consequences of small-pox. It has often impressed itself upon my mind that the profession and its press would have done more to convince the public mind of the necessity of vaccination, and given a stronger checkmate to the crazy antivaccinators, if it had been more clearly impressed upon them that vaccination does not necessarily protect against small-pox, but against the severity and fatality of it; that, just as any one may have a recurrence of any eruptive fever, so one may have first cow-pox, and then cow-pox *unmodified in essence, but in circumstance*; in other words, small-pox.

It is a somewhat curious coincidence that my two sisters were carefully vaccinated as infants, and, about twelve years afterwards, both took small-pox from a servant. One had about half-a-dozen pustules, and the other none. In the present instance, I have no doubt, nor do I think my readers will have any, that the three recent cases I have recorded, are also veritable cases of "*variole sine variolis*". I trust that the imminence of the present epidemic in England will furnish an apology and a reason for the appearance of these notes.

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NOTES OF A VISIT TO THE MILITARY HOSPITALS OF THE CONTINENT.

By ALBERT A. GORE, M.D., Surgeon-Major, Dublin.

III.—GERMANY.

WHEN a soldier "falls sick" in Germany his name is entered in the company's sick-book, which is laid before the surgeon on his visit to barracks. If the complaint be trivial, the surgeon writes opposite the man's name, "Fit for duty"; if sick, the nature of his disease, and whether he is to be confined to barracks, or sent to the lazareth. If removed to hospital, his name is entered on an admission-card, with the number of his regiment, battalion, company, and several other particulars, and on the back an inventory of his clothing; and without this card he will not be admitted. He is either marched or carried to hospital. This card can be used at least six times, and, as the service of the German soldier with the standards only extends to three years, usually suffices for his whole military career: it is a kind of regimental record of his diseases or admissions to hospital.

Upon his arrival at the lazareth, he is seen by the Oberstabsarzt, or senior staff-surgeon, in the consulting-room of the hospital, who distributes the patient to his proper division, and causes his name to be entered in the admission and discharge book. His name is also entered in the daily diet-sheet (*Haupt-Diät-Verordnung*) for the information of the superintendent or commissary of the hospital. His regimental clothing is taken into store, he receives a bath, and next assumes the blue and white striped hospital dress, proceeds to the ward, when the assistant-surgeon enters the particulars of his case and disease in the medical case-sheet (*Journal-Blatt*); this is hung at his bed-head, and kept up daily; in the case of acute diseases, the temperature is recorded for the information of the Stabsarzt, or visiting staff-surgeon, who is accompanied by the Assistenzarzt or Unterarzt, to whom the necessary directions as to diet and treatment are given. A bedside cupboard contains the patient's clothes, medicaments, etc. In the centre of each ward are a few chairs and a table, at which the convalescents are allowed to amuse themselves, playing at cards, etc. In some hospitals is a separate ward, where the men are allowed to smoke. The counterpanes are white; and sisters of charity, or deaconesses of the Order of St. Elizabeth, usually supplement the ordinary hospital attendants. As only the non-commissioned officers are allowed to marry, there are no women's and children's hospitals. In Berlin, the sick of the garrison will shortly be treated in two lazareths, capable of holding in the aggregate 1,120 patients.

The diets are prepared in copper boilers or closed ranges, and consist of soup, meat, and brown bread for the less severely sick, and small loaves of white bread, and chops or roasted meat, with various "extra portions", for the graver cases. Breakfast (*Frühstück*) is taken at 7 A.M., dinner (*Mittagessen*) at noon, and supper (*Abendessen*) at 7 P.M. Extras, consisting of "portions" of wine, beer, porter, tea, milk, etc., seem to be sparingly given, but can be ordered without restriction if required. In the hospital with three hundred sick, only twenty-nine of the patient were on extra diet.

Closets and urinals are on each landing in proportion to the number of inmates; the baths are generally in a separate room or build-