a medical officer of health. To illustrate the necessity of this, I may say that I have often, when cases of fever have prevailed in a quarter not accessible to me, or deaths from it have been ambiguously reported in old-world nosology, ascertained through the inspectors, to my own satisfaction, what the disease was—whether typhus or enteric fever; diphtheria or scarlet fever; small-pox, erysipelas, or measles; Asiatic cholera or diarrhoea; and upon such conclusions I have taken my measures. It would certainly interest the profession to learn how these trained detectives can tell the name of the culprit by the style of the mischief done, although they have never seen the patient. For instance, the duration of the disease, with the presence or absence of diarrhoea, with other points ascertained in quiet gossip with a neighbour, will enable them to distinguish between maculated typhus and enteric fever. The character of the locality, the absence of infection, the age of the patient, the duration of disease, with minor points easily ascertained, will often point to “tubercular meningitis” and not to “typhus”, which may appear as the cause of death on the return made to the Registrar-General. My measures have always been taken according to my own conviction on the reports of the inspectors when the case was not accessible to my own inspection, or reported to me by a member of the medical profession.

The inspectors should be well paid, so as to be able to live generously, and so become less liable to be affected by any of their unpleasant and dangerous duties. They should not be expected to do any menial work, but each should be allowed to have at his command two labourers for the immediate removal of minor nuisances not requiring constructive work, for whitewashing courts and alleys and for the application of disinfectants.

The district under the charge of each inspector should not be too extensive. The extent might vary according to the character of the locality. Where the population is poor and the district contains many courts and allies, a population of 20,000 would give ample work to an able man; for fashionable localities, with well-to-do residents, it might be extended indefinitely.

The nuisance-inspector should be thoroughly acquainted with all the sewers and drains, so as to be able to give advice for remedying any defect in the connecting drains. He should walk through the whole of his district daily; and twice a week at least, either through himself or the men at his command, inspect every privy in the courts and alleys easily accessible. These privies should be disinfected each time they are inspected.

Although not expected to do any menial work in a general way, he must be prepared, in case of a sudden outbreak of Asiatic cholera, to take disinfectants in his own hands; in the absence of his men, to visit the affected premises; and, under the guidance of the medical officer, not to leave them until every particle of the choleraic poison has been destroyed.

To sum up his duties, they are as follows:—To see that there is no escape of sewer-gas in any part of his district; to see that the surface of the ground surrounding houses is hard and impermeable to water; to see that there is no unnecessary accumulation of dirt in any place within his district; to find out and report every case of infectious disease to the medical officer; to take his instructions on every case and see them carried out; to give instructions and to superintend the men at his command for doing menial work; to enter on his journal daily a summary of every day's work.

I have not dwelt on the large amount of unnecessary trouble given to the nuisance-inspectors by timid old ladies and sometimes timid old gentlemen who have in their walks passed a garden with some rotten cabbages in it, or have seen a dead cat or dog where such should not have been found, or have smelt a little ammonia from their neighbour's stable. These complaints being of an æsthetic rather than of a sanitary import, I have paid but little attention to them.

There are also other duties imposed on nuisance-inspectors by their employers—such as finding out the addresses of parties to be summoned and serving notices on them, inspecting the watering of the streets and the scavenging, checking the water used for street-watering, etc.; but with these duties I have had nothing to do. Such duties should not be too numerous; and, in my opinion, it would be better to employ a special officer for some of these, so as to leave the nuisance-inspectors free to perform only sanitary work.

I have thus attempted to sketch out in faint outline what a nuisance-inspector ought to be. With men more or less like the pattern I have drawn, it has been my good fortune to work for six years. Without them, I could have done but little. They are my *antenna*, by whom I can probe the most hidden arcana of a large city. Many of the measures recommended by and attributed to me were originally suggested by them.

In concluding, I may say that on one or two occasions, under the panic of a threatening epidemic, other bodies and private associations

have sent out amateur inspectors. These, with the zeal of new recruits, have reported imaginary nuisances by hundreds, and have so done much more harm than good by calling away the trained men to confute their reports. There have been some exceptions to this; but, on the whole, amateur nuisance-inspecting is like some other amateur work—very indifferent in character, and often injurious. The duties of a nuisance-inspector are to an able man simple enough, but they must be learned.

Nuisance-inspectors are indispensable assistants to health-officers—qualified members of our profession—but still only assistants. Unless guided, supported, and assisted, by the experience and influence of medical officers who can command the respect of the public, they will fall easy victims to the thousand and one theories of self-made sanitarians who abound among the unoccupied and affluent residents of our large cities, who have been the victims and supporters of all the mischief-producing theories which, like a blight, have blown over scientific medicine.

In conclusion, let me tender a sincere apology for the meagre and imperfect character of this paper, which was written only at the earnest, and, I may say, importunate, entreaty of our respected chairman, who is one of the most devoted votaries of Hygieia.

ANOMALOUS SYMPTOMS IN A CASE OF MORPHIA-POISONING.

By JOHN SPENCER FERRIS, M.B.Lond., etc., Uxbridge.

DR. GUY, in his book on *Forensic Medicine*, after stating that the symptoms of morphia-poisoning are those of opium and its preparations, relates two or three anomalous cases in which tetanic spasms were prominent symptoms, and throws out a suggestion that the three grains of acetate of morphia that Palmer gave Cook were the real cause of the latter's death, and not strychnia, as was generally supposed. On this ground, and on the similarity of the symptoms to those of strychnia-poisoning, I think the following case important.

Sarah V., aged 60, cook, who was just recovering from a severe attack of bronchitis, took at 2 P.M., March 19th, twenty-five drops of a solution of muriate of morphia for a bad cough and diarrhoea. She was then left alone; but at 4 P.M. she rang the bell. The nurse went up and found her lying on her bed bathed in perspiration; the face was swollen, and the eyeballs protruding; both sides of her mouth were twitching; the arms were bent, and moved backwards and forwards convulsively. In a moment the movements ceased, and she complained of great pain in the chest, and could not take a long breath. She said she could not see anybody or anything. After a time, the convulsive movements in the arms and face returned. She had great pain in the back and partial opisthotonos, with delirium, and fainted several times, so that she was thought to be dead. A large quantity of warm water was given her, and she was very sick at 5.30 P.M. I saw her at 6 P.M. I found her complaining of great pain in the chest, principally in the middle of the sternum; the breathing was short and quick, and she sighed often; she also had pain in the bowels. Her legs were twitched up, and she begged that they might be held as she could not keep them quiet, and said it felt as if there were worms in them. She had also pain and twitches all down her spine. The pupils were very much contracted, not being so large as a pin's head, and she saw red and black spots floating before the eyes. The pulse was about 60. She had no disposition to sleep; the cough had entirely ceased since taking the morphia, though incessant before. All the pains and convulsions then left her, and she was quite easy for two or three minutes, when they returned again; the nurse told me that, ever since she was taken, there had been distinct intervals between the paroxysms. The patient afterwards told me that she first felt the effects about half-an-hour after taking the morphia; that the first symptom was violent pain in the chest and inability to take a deep breath, and then pain in the bowels; and that she never had any disposition to sleep, and she could always open and shut her mouth freely, and therefore had nothing like locked jaw. I gave her sal volatile, brandy and water, and strong tea, which she swallowed without difficulty. Warmth was also applied to the bowels and chest. The convulsive movements and pains gradually left her; and when I quitted her house at 9 P.M., she was only complaining of slight sickness and pain in the head. She could not see distinctly, though the pupils were still much more contracted than usual. The twenty-five drops of morphia were dropped out of a four-ounce bottle, labelled “Solution of Muriate of Morphia, ten to sixty drops per dose,” obtained from a chemist in Reading, so that I cannot exactly tell the strength, more especially as these were almost the last drops in the bottle, and very probably there was some undissolved alkaloid in them. How is it a chemist, now that the Phar-

macy Act has come into operation, dares to sell to an unprofessional person four ounces of morphia solution? I may say that fourteen years ago, when she broke her leg, she had tetanus. On March 20th, at 10 A.M., she had been easy all the night and had no twitches, but slept only about an hour. Pulse 60. The pupils were still contracted. She said that her legs and arms felt as if they were alive, and as if they were going to jump up. She complained of a stiff neck, and of being "sore all over". She had passed but a very little urine with great difficulty. The tongue was foul. The bowels had not been open. There was no cough. On the 21st, she was much better, and had none of the feelings of which she complained on the previous day in her limbs. The cough had returned. The pupils were normally dilated, and her eyesight was as good as ever; in fact, she seemed to have no relic of the morphia-poisoning.

CLINICAL MEMORANDA.

MR. ELLIS'S MODE OF VACCINATING.*

I HAVE had favourable experience of the plan of vaccination advocated by Mr. Robert Ellis, of Chelsea, in January 1871. It seems to me, indeed, that its value in revaccinations can scarcely be overrated, as it proves more certain than any other plan. Thirteen cases in which I have adopted it have all "taken" decidedly, although eleven of them had, during the previous few weeks, been operated on repeatedly by myself or others, both with lymph from ivory points, and with fresh lymph direct from arm to arm, without any effect. I would suggest it should be recognised and established generally in the profession, as the most eligible mode of revaccinating; for although too troublesome (requiring two interviews with the patient) for common use, it offers under certain circumstances—as in persons about to go abroad, or compelled to submit to exposure to small-pox infection—advantages, in its certainty of effect, apparently unattainable by other methods. The very unsatisfactory observation "not taken", and the equally unsatisfactory inference of "not susceptible", often made after other modes of operation, may hereby be rendered almost obsolete.

Mr. Ellis's plan consists simply of applying, with a very small brush, to some spots on the arm, enough acetum cantharidis to cause in each place a blister about the size of a pea to have risen by the next day. This vesicle is to be punctured (at top), and, the fluid having been pressed out, an armed ivory vaccine point is to be inserted, and left there for a few minutes. As large and energetic pocks result, two (or at most three) will suffice. It is essential to success to first procure a good little blister; therefore, to ensure the action of the acetum cantharidis, it is well to previously free the skin from its natural greasiness by a thorough washing. Some ether on a dossil of rag is very effectual to this end.

GEORGE F. HODGSON, Brighton.

VARIOLA CONFLUENS AFTER RECENT REVACCINATION.

I HAVE just attended the following case of variola confluenta, which proved fatal on the morning of the fifth day of the eruption, in a young man who had been very recently revaccinated.

George B., aged 22, A.B., of H.M. ship *Narcissus*, was seen by me first on Sunday afternoon (29th ult.) at Cawsand; he was staying with his relatives there, having been granted leave of absence for a few days. I found him very feverish, with severe lumbar pains, sickness and extreme prostration. On inquiry, I learnt that he began to feel ill only on the previous Friday evening, and, attributing his symptoms to a feverish cold, he did not seek advice before. He was immediately ordered to bed, and placed under treatment. The following day, the symptoms continued unabated, although he had had some sleep during the night. On a careful examination of his skin, no efflorescence or eruption was detected, except on his left arm, where I saw the remains of a full sized recent vaccine pustule, with fading areola. The next morning (31st ult.) his body was covered with a deep purple erythematous rash, in crescentic patches, very deep on the lower extremities; this in the course of the day was covered with imperfectly developed pustules, all running into each other, except a few on the wrists and the back of the hands. The pocks on the face were small, thick, and very confluent, the skin being very livid, but not much swollen; on the day previous to my patient's death it was of a very dark hue.

The low typhoid symptoms, attendant on this condition, rapidly increased; deglutition becoming very difficult, from the fauces, velum, etc., being extensively affected, and he sank early on Saturday, the 4th instant. There were no hæmorrhages or diarrhoea.

It was ascertained that George B., had been revaccinated, with some of his shipmates, on Oct. 20th, and, as stated above, one large pustule was the result.

EDWIN J. WORTH, M.R.C.S. Eng., etc.,
West Anderton, Millbrook.

CASE OF MULTIPLE MALIGNANT TUMOURS.

I BRIEFLY record an unusual case of multiple malignant tumours. The patient was a gentleman, aged 60, who had led an active and temperate life, and who had retired from business to the country four years ago. With the exception of occasional attacks of dyspepsia, he had enjoyed good health till the close of last year. He then began to suffer from loss of appetite and nausea, with a thickly furred tongue, and great pain over the region of the sternum; and he complained of what he termed "blind boils" on the back. On examination, I found a subcutaneous tumour, about the size of a hazel-nut, presenting all the character of scirrhus, below the second rib near its junction with the sternum. On the back were several dense well-defined cutaneous tumours, in different stages of development, and varying in size from a threepenny-piece to a half-crown. These were of a bluish colour, due to the presence of numerous minute veins converging towards the centre of the tumours. On the largest of them a crop of vesicles appeared, which gradually enlarged and coalesced; slight oozing of blood occurred, and ultimately the tumour greatly resembled a large ripe mulberry. On the forehead, also, was a conical tumour about half an inch in height. The growth of these tumours was slow; but pain, which had been very great from the beginning, became excruciating about the month of May. The constitutional symptoms also increased in severity about this time, and Mr. Bickersteth of Liverpool visited the patient with me. On passing the hand over the skin, a great number of small tumours could now be felt, which, however, were confined to the trunk, none appearing on the extremities. Death, from sheer exhaustion, took place in the beginning of August.

Treatment was, of course, chiefly palliative, by the local application of extract of belladonna, and various other anodynes, and by the hypodermic injection of acetate of morphia—at first a quarter of a grain, gradually increased to one grain or more twice daily. If the effect of this happened to pass off too soon, the patient's sufferings were very great. Mechanical appliances were also required to protect the tumours from friction, even of the patient's night-dress. A *post mortem* examination was not obtained, but there were no symptoms indicative of the development of tumours in the internal organs.

GEORGE HILL, M.D. Edin.

The Elms, Hooton, Chester, November 1st, 1871.

THERAPEUTIC MEMORANDA.

ABDOMINAL PUNCTURE IN TYMPANITES.

IN the latest issue of the JOURNAL, I find that, besides myself, there are several claimants for priority in the practice of paracentesis of the intestine in tympany. Mr. Lawson Tait of Birmingham thinks it belongs to himself rather than to Dr. Davey or Mr. Teale. On reference to my communication of the same date, it will be found to belong to neither. The quotation mentioned by Dr. Littleton in the same issue, from the lecture of the late Mr. Teale, given before the Provincial Medical and Surgical Association in 1845, shows clearly that we are all so far late in the field that priority of performance cannot be claimed by any of us. But perhaps some of us may lay claim to an advance onward from the single operation, to press and employ it as not only a desirable, but a judicious operation. I cannot find that Mr. Teale did more than mention the practice favourably; certainly from that time down to the reading of the paper in March 1868, has the plan been received by the profession as a legitimate operation. In the remarks in the paper just mentioned, I did not much more than state the cases and the results; but before this, in my classes, I had, as occasions occurred, laid down the advantages of the operation; and at one of the Association district meetings, had narrated the cases and recommended paracentesis. But, in point, Mr. Thomas Smith (see *Transactions of the Clinical Society for 1869*), in describing a case where the treatment was adopted, after alluding to my cases, enlarges upon the question, and, without insisting strongly upon the operation, believes that one day it will be of more extended application. Dr. Allbutt's (of Leeds) case was brought out in the *Practitioner* the following month. Then Mr. Wathen, in the paper which has brought forth such interesting correspondence, from totally independent sources, urges its value and instances five more cases.

* Note read at a meeting of the West Sussex District, held at Worthing.