surrounded by a high colored crysipelatous flush; wandering pains in the extremities; the pulse strong with thirst; the tongue became very tremulous, with considerable snuffling in the nose; the eyes and nose were very much tumefied; the snuffling very much increased; the expectoration was mixed with pus-like matter, which appeared to have been principally discharged from the nares by the mouth, as he was not able, from debility, to discharge it by the nose; also coma, with low muttering delirium. The tongue became very tremulous, as also the upper extremities; the pulse fluttering and thread-like; involuntary discharges; the swelling of the head and face considerably increased, extending down the throat; all which symptoms, after progressive aggravation, terminated in death. No post-mortem examination was allowed, but the body was in such a state as to oblige the friends to have it buried in a few days. The treatment was not conducted on any defined plan, but was varied according to circumstances, so as to meet the more urgent symptoms.

P.S. I could not discover any appearance of his having been inoculated, but having seen a glandered horse some time since, and thinking the above unfortunate case so much resembled that of the horse, induced me to inquire if there was any thing the matter with either of his horses, when he told me that one of them was laid up with a bad cold; on examining the animal, I found it had a profuse discharge from the nostrils, with the glands of the throat very much enlarged; it proved a decided case of glanders. The horse died in ten days afterwards.

TWO CASES OF BONY TUMORS.

By JONATHAN TOOGOOD, Esq.

Senior Surgeon to the Bridgwater Infirmary.

CASE I.—A servant of Mr. George Baker, of Cannington, a remarkably strong woman, twenty-one years old, consulted me on account of a tumor occupying the whole space behind the left ear, which had assumed its shape, and extended to the angle of the jaw. It was so firmly attached to the skull that it was only by fixing her head very firmly, and grasping the tumor with both hands, I could perceive the slightest lateral motion—so slight, indeed, that another surgeon, who saw the patient with me, thought it quite immovable. We both thought it bone. I made an incision through the scalp, which proved that our opinion was correct; but it was so closely bound down by the pericranium, that it became very difficult to detach any part of it; at length, however, I succeeded in doing so all around the base, and found that it was connected with the mastoid process by a bony attachment. With considerable difficulty I got a strong spatula between the skull and the tumor, and holding the tumor firmly with one hand, whilst I was endeavouring to raise it with the spatula in the other, the patient, who had been very ungovernable during the operation, made a desperate effort to get away from me, by which the tumor was torn from its attachment. It proved to be a solid piece of bone, weighing three ounces. The operation was a difficult one, and attended with a good deal of hæmorrhage. The skull was smooth under the tumor, except at the mastoid process, which was rough, and

appeared diseased. There was no exfoliation, and she recovered in a fortnight.

CASE II.—In this case the tumor was situated on the metacarpal bone of the ring finger of a boy of sixteen, and had grown to such a size as not only to render the finger useless, but to impede very considerably the motions of the hand. As all treatment had been unavailing, the removal was recommended, which was effected in the following manner:—An incision was begun at the carpus, by which the middle and little fingers were separated from the diseased ring finger, whose metacarpal bone was turned out at its articulation at the carpus. Notwithstanding the numerous vessels which were divided in the operation, none required ligatures; the parts were brought together and retained by plaster and bandage, and speedily healed.

Bridgwater, April, 1842.

ON THE EMPLOYMENT OF ARSENIC IN THE PRESERVATION OF MORBID PREPARATIONS.

By T. SPENCER WELLS, Esq., R.N., M.R.C.S.

Assist.-Surg. to the Royal Naval Hospital at Malta.

Very soon after I entered upon the duties of assistant-surgeon to this hospital, in January last, several highly interesting specimens of diseased organs and tissues fell under my observation in the dead-house, and I was much disappointed (as, I have no doubt, many of your readers have frequently been), to find how quickly the appearance of the parts changed from loss or alteration of color after preservation in spirit. Whilst conjecturing how these changes could be avoided with due regard to economy, it struck me that, as the stomachs of persons poisoned with arsenic were found in a state of perfect preservation after a considerable time, and under very unfavorable circumstances, solution of the arsenious acid would probably fulfil the object I had in view. In the early part of February a liver, which was the seat of an enormous abscess, was sent to me by Dr. Galland, the able professor of anatomy and surgery in the University of Malta, the putrefactive process having considerably advanced. The size was such that I hesitated about incurring the expense of alcohol, and determined to try the effect of an arsenical solution. It is proved that when arsenious acid is treated with boiling water, that water, when cool, will hold a much larger quantity of the arsenic in solution than when cold water alone is used at first. I accordingly made a saturated solution in boiling water, and filtered the solution, when cool, upon the liver, in sufficient quantity to cover it. After four days the fætor had diminished, but the solution had become turbid and blood-red in color. It was changed, and at the end of a fortnight the surface of the solution was thickly covered with a blue mould, and I again changed the solution. After a month, the same changes having taken place, the solution was a fourth time renewed, and I did not touch the preparation until yesterday. The experiment I then found to have been signally successful as far as regards the preservation of the liver; for in color, consistence, and general appearance, no alteration whatever had taken place; but the solution has entirely failed in

filling the place of spirit to show the diseased parts on the shelves of a museum, as it becomes so turbid that it is impossible to recognise what is within the jars. I am rather at a loss to explain the perfect preservation of the color of the parts with the deep coloration of successive solutions, but perhaps the blood contained in the larger vessels might produce the latter effect.

My next experiment was to try the comparative effects of arsenical solution and alcohol, and on the 12th of March last, having a kidney in a state of the most intense hyperæmia, I placed one half of it in alcohol and the other half in arsenical solution prepared as before. I did not touch these until yesterday; both liquids were very turbid, and on taking the parts from the bottles, I found the one from spirit much harder and whiter than at first, while that from the arsenic was nearer the natural state than I could have expected. During the months of April and May I made similar experiments with portions of brain, lung, liver, kidney, and intestine, in spirit, arsenical solution, spirit of turpentine, olive oil, and solution of the bichloride of mercury. In every instance the trial was in favor of the arsenic, with one exception, in which I treated a brain containing an encysted abscess with boiling spirit. The heat coagulated the blood and preserved the natural appearances very closely.

I have also made some experiments to determine if, after the natural appearances of parts have been for some time preserved by arsenic, they are still removed by subsequently placing these parts in spirit. This is of some importance in case it shall be found impossible to keep the arsenical solution clear enough to display preparations in a museum, and I regret that sufficient time has not elapsed to enable me to afford any satisfactory information on this point. I must say the same with regard to comparative trials of the solutions of the arseniate of potash, arsenious acid, and the arsenical paste. Perhaps it would have been better to have deferred this communication until time had given some value to these results, but removed as I am from the repositories of medical literature, I cannot learn if I have been preceded by any one in this investigation; and as I do not wish to waste time in determining a point which may be already settled, I have to request your insertion of this notice of a subject new, at least to me. I believe many preparations are lost, simply because parties will not incur the expense of spirit to preserve them. Now, the arsenical solution furnishes such persons with a cheap liquid in which the natural appearances can be more accurately preserved than in spirit. The parts may then be presented to some public museum, or removed from the jars when it is wished to examine them. I do not despair, however, of making some arsenical preparation answer every purpose of spirit; but in the mean time hope, that if some of your numerous correspondents possess information on this subject, they will communicate it to your readers, or that some one less engaged than myself in the purely practical duties of the profession will devote a period of leisure to its investigation.

Malta Hospital, August 6, 1842.

P.S.—I have applied heat in various ways to try its effect in preserving the color of parts by the coagulation of the blood, and will forward you the results in another communication, if time shall prove them to be of any value.

PROVINCIAL MEDICAL JOURNAL

SATURDAY, SEPTEMBER 10, 1842.

The check which the late abortive attempt to re-enact the whole of the poor-law has received, affords opportunity for one more struggle, on the part of those medical practitioners who accept office under its provisions, to obtain more equitable arrangements. However Mr. Guthrie may felicitate himself on being the most successful reformer of the abuses introduced directly and indirectly by the commissioners and their assistants, and far be it from us to detract from his merits, it is still evident to every reflecting person, that, as regards really practical questions, much still remains to be accomplished. The abolition of the system of tender is a concession to the feelings of the profession, too loudly expressed, we may observe, to be resisted; the extra remuneration for the performance of certain capital operations is, under the circumstances, sufficient, and the attempt at reducing the extent of the districts and the amount of the services required within the limits of possible exertion, though not so successful as could be wished, is yet to be hailed with satisfaction, both as recognising a principle and as affording evidence of an intention on the part of the commissioners to retrace their steps.

It matters little whether these improvements have been forced or otherwise, whether they have been brought about by the personal influence of our new ally in the cause of reform or by the forcible and persevering representations of the Provincial and other medical associations. The concessions, however obtained, are of value, and not the less so because they afford the acknowledgment, that, with all its plenitude of power and wisdom, the commission can err, and that its regulations, happily for the medical profession for the suffering poor, and for the general welfare of these realms, have neither the force nor the stability of laws which alter not.

We are willing to believe, moreover, that the central commissioners have been misled by the representations of those from whom they have hitherto sought and derived their information,—that they have at length learned the lesson that their underlings are not in all cases to be trusted,—that the very senses, as it were, through which they receive impressions from without are, like those of the natural body, liable to error and not to be depended upon without careful and repeated testing of their accuracy. Much of the evil which has resulted from the operations of the commissioners, together with much of the outcry which has been raised against their proceedings, has, without question, been occasioned by the false impressions conveyed to them through the prejudiced views and distorted