ART. V.—Case of Trephining the Mastoid Process. By W. Colles, Surgeon to Steevens' Hospital.

The experience of most surgeons and the records of periodical and general medical literature fully prove that there are few cases which excite more alarm in the mind of the practitioner than those in which, after there has been for some time a discharge from the ear, symptoms of head affection suddenly supervene. We find that the termination of such cases in general is rapid and fatal, and that on examination more or less disease of the brain or its membranes, with erosion of the bones in the neighbourhood, exists. We have numerous records of such cases and of the post mortem examinations but few of recovery from this state.

Having been so fortunate as to conduct such a case to a favourable termination by a proceeding often suggested but I believe seldom practised, I venture to record it, as it may lead surgeons to adopt it more freely, and thus to rescue some patients from a most unfavourable condition.

CASE.—A middle aged married lady who had previously enjoyed tolerable health, returning from England last September on the Holyhead packet, was suddenly seized with severe pain in her left ear; this continued a few days when it was relieved by a discharge of pus from the meatus; this continued, and she found the hearing of this ear gradually failing. After a few weeks she perceived a small piece of bone in the discharge, the pain soon after began to return; this, at first, was in the vicinity of the ear, but gradually increased, and at length attacked the head; it was most severe at the back part of the left side, and was such as to make her fear the loss of her reason. It would exist for two or three days, then moderate, but never leave her; she complained of numbness and debility of the side; there was also considerable constitutional disturbance, loss of appetite, thirst, quick pulse, dry skin, loss of sleep. During the progress of the disease she was alarmed by finding a sudden burst of matter into her throat; when it ceased there she felt unable to move, and any effort only aggravated her symptoms.

December 28th.—I saw her with Dr. Armstrong, her medical attendant, and found a fulness behind the ear, pain on pressure, and a blush of redness about the situation. I advised an incision down to the bone. It opened a small artery which was stopped by
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pressure, the symptoms were relieved, but in a few days the wound closed up and all the symptoms returned with even increased severity. I now recommended the perforation of the bone, but she would not consent to this operation till she was again alarmed by a second gush of matter into the throat.

January 5th.—I now found the patient much worse; the swelling and redness behind the ear considerably increased; swelling extending above the ear and along the front of the face so that the sides of the head were quite unequal. She also complained of pain on moving the jaw, and a sensation as if the bones were dislocated on any motion and returned into their places with a grating sensation. As she was unwilling to use chloroform, I applied the æther spray to the part, then made an incision behind and parallel to the ear down to the bone through parts very much thickened when a drop of thick pus came away. I then used a quarter inch drill fixed in a horizontal handle; with a few turns of this I perforated the outer shell of bone. I then with a sharp steel probe broke down the walls of the mastoid cells to the depth of nearly an inch, when she suddenly exclaimed, "what is that loud noise!" On withdrawing the probe the matter began to flow more freely, and continued for some days, when a fresh swelling appeared which was caused by an abscess above the opening; this was evacuated by enlarging the incision, when the bone was felt quite bare.

The symptoms again began to mend, and she continued to improve daily—the pain ceased and the appetite and strength gradually returned. She now sleeps well, and is able to take exercise, and, more remarkable still, the hearing has returned, and is as perfect in the left ear as in the other.

This case is imperfectly recorded, as I only saw the lady occasionally in consultation with Dr. Armstrong; I may, however, make a few observations on its progress and treatment. There can be no doubt but that here the disease was very extensive, it must have occupied the cavity of the ear as evidenced by the discharge, the portion of bone expelled, the loss of hearing, and the curious symptom, hitherto, I believe, unnoticed in similar cases, the discharge of a quantity of pus into the throat on two separate occasions, which must have passed from the internal ear through the Eustachian tube. Yet with all this amount of disease we find the hearing fully restored, after its loss for so many months.

The disease then extended to the mastoid cells, as indicated by the pain, swelling, and redness in this situation, and finally, it threatened to produce cerebral mischief as indicated by the fever, severe pain in