of a bright lemon colour, and was, I think, evacuated by M. Verneuil, who had charge of the service at the time.

These cysts may vary much in the colour and consistency of their contents. Sometimes a certain quantity of blood is mingled with the serous effusion, and may be quite thick and dark. There may be also small fibrinous concretions similar to the rice-like products contained in the serous cyst known as ganglion.

The location of the cyst which I saw was about the middle of the back, and rather to one side. This cyst was distinctly circumscribed. Its walls were quite firm, and composed probably of condensed areolar tissue. The mechanism of the production of such a serous effusion was remarkable, but easily explained: There is between the skin of the back and the subjacent muscles a layer of very loose areolar tissue which permits of considerable freedom of motion. By a blow this tissue may be ruptured, and a certain quantity of fluid poured out, which is sometimes pure serum, and at other times blood and serum mixed, and of variable thickness. The constantly sliding motion of the parts (*glissement*) singularly favours the production of these kind of tumours after a glancing blow on the back. The extended article of M. Morel Lavallée contains a number of interesting and illustrative cases.

Dr. Henry Shiff, of this city, has just mentioned to me a case which he saw in 1862, in the wards of M. Vollemier at the Hôpital St. Louis at Paris. The tumour, in this instance, was on the outside of the thigh, and was caused by a glancing blow which the patient had received about a month before. Vollemier, it seems, diagnosticated with confidence a deep-seated abscess, and before plunging his knife into it, said to those who were present, "You will see a tumblerful of pus escape," but, in its stead, out came clear serum.

N. Y., 23 FIFTH AVENUE, Jan. 13, 1869.

ART. VIII.—*Remarkable Instance of Burns from Lightning.*

By WM. M. HOLTON, M. D., of New Harmony, Indiana.

On the 25th of March, 1868, I was called to see Mrs. E. P., aged sixty-one, who had been for some months subject to indigestion, vertigo, and numbness of the limbs, which impeded walking, and interfered with the performance of her domestic duties, and who had been, thirty-five minutes before I saw her, struck by lightning. I was informed that while she was in an out-building, the lightning had struck and shattered a tree about one foot distant; then leaving the tree, about seven feet from the ground, it had penetrated the wall of the building, which was an unplastered frame one, splitting off part of the corner-post and struck Mrs. P., who was sitting close by, on the back of her head where her hair was "done up" in a knot

and fastened by two ordinary wire hair-pins. The hair was much scorched, and under the knot of hair, the skin was severely burned.

Thence the electric fluid passed down, burning the lower portion of Mrs. P.'s right ear, in which was a gold ear-ring; then crossed the throat and passed down to the left of the sternum. The burn thus produced was about three inches wide, covered with blisters, and the skin for several inches on each side was very red and painful. The fluid here left her body, and finding some other conductor, passed down still on the left side to just above the crest of the ilium, extending thence forward and downward to the symphysis pubis. This burn was about twelve inches long, and about the same width as the first; it was more severe than any other of the burns, except that at the spot where the fluid passed from the hair-pins to the skin. The next burn began on the patella of the right knee, extending to the bottom of the heel, in reaching which it wound around the inner side of the leg. About four inches below the knee was a sound strip of cuticle, an inch and a half wide. The lightning passed off at the bottom of the heel, bursting open the heel-seam of a strongly sewed gaiter boot.

Mrs. P.'s husband found her a few minutes after the accident lying on the floor, insensible, but occasionally uttering a groan. She afterwards declared that she experienced no pain or uneasiness at the time, and knew nothing of what had occurred until she was aroused to consciousness by the free application of cold water, which her husband says was about twenty minutes after the accident. She had much nausea and oppression, and expressed herself much relieved by free vomiting.

When I reached her, about fifteen minutes after the vomiting, she was entirely conscious, and (with the exception of slight delirium while suffering from fever) remained so during the whole of her illness. She was cold, covered with clammy perspiration, and almost pulseless. She was in great pain, and complained that she was "burning up." Brandy was administered, and her pulse soon rallied; the profuse perspiration diminished, and she became more comfortable. Subsequently her wounds were treated by Dr. Edward Murphy and myself, like ordinary burns, with carron oil (equal parts of linseed oil and lime-water), which, as usual, proved a very soothing and cooling application.

Up to this time, June 10th, she has slowly gained strength; her wounds are now cured, and she is comparatively comfortable; her appetite is pretty good, and she is quite cheerful, except when left alone, when she is disposed to sleep too much. A feeling of great lassitude announces to her the approach of a thunder-storm before its coming is perceived by others.

I had hoped that the shock she experienced at the time of the accident might relieve her to some extent of the numbness of which she had previously complained, but these hopes have not been realized, the numbness having increased rather than diminished.

An examination of Mrs. P.'s clothing showed a hole burnt by the lightning in the upper part of her chemise, in front, and in her corset-lining; also several in her flannel petticoat, and in her stocking. The lightning melted portions of the wires of her hoop-skirt; it appears to have passed down the steel of her corset, melting a small part of the lower end of it off. The steel clasp of her elastic garter seems to have acted as a conductor, and thus saved from burn the strip of cuticle before mentioned, and

which was immediately below it. In the same way the steel of her corset, and the metal of her hoop-skirt, appear at several points to have carried off the electric fluid, and thus produced what at first sight it seemed difficult to account for, the detached character of the several burns. Had the wound been continuous from head to foot, a fatal result would have been, in my opinion, inevitable.

ART. IX.—*Notes of Two Remarkable Cases of Cerebral Injury, followed by Recovery, in one Case resulting in an Entire Change of Character.* By S. C. MENDENHALL, M. D., Frazeysburg, Ohio.

CASE 1.—Nov. 27, 1856. W. G——, laborer, aged 19, spare habit, nervo-bilious temperament, received a severe wound on the right side of the head when sitting on a log a few feet from the end of which a comrade was chopping wood. The axe glanced, slipped out of the chopper's grasp, and struck G—— just above the ear, burying the bit of the axe in his skull. He was carried to the house, only a few rods distant, where I saw him some two hours afterwards. He was almost pulseless; clothing, bed, and floor drenched with blood, which was still slowly oozing from the wound, mixed with brain substance and minute fragments of bone. The cut was horizontal, on a level with the orbit five and one half inches long externally, a little less internally owing to the convex shape of the bit of the axe. A line drawn upward from the external meatus auditorius would almost exactly bisect the cut.

I removed a large number of small spiculæ, found the skull much shattered by the violence of the blow, and not less than two tablespoonfuls of brain on the cloth which had been kept by the side of his head, until my arrival. I shaved the scalp adjoining the wound, adjusted the soft parts by means of adhesive strips, directed the application of external warmth to aid the circulation, and administered opium according to symptoms.

Contrary to my expectation he recovered, with no specially interesting points developed during convalescence save a marked and peculiar *change of voice*, which became permanent. But from that time his whole mental and moral nature seemed to have undergone a marked change. *Before* the injury he was a quiet, unassuming, somewhat stupid boy, universally regarded as honest. *Afterward* he became noisy, self-sufficient, sharp, and seemingly devoid of moral sense or honesty. These new traits evinced themselves immediately and strikingly as soon as convalescence was fully established. I much regret that I am unable to trace his history since 1858.

CASE 2.—Private F., Co. G, 76th Reg't Ohio Vols., was struck by a minie ball in the assault on the outworks at Vicksburg, Miss., May 19, 1863. The ball entered the left temple on a level with the eye, about one and a half inch posterior to the external angle of the orbit, severing in its course both optic nerves and passing out of the other temple about one fourth of an inch further back than the point of entrance, but on the same