

case the death seems to have resulted from the effect upon the functions of innervation; artificial poison must produce death by its operation on some of the of the organs, and must leave evidences after death; I am not an analytical chemist, but I have made chemistry my study; I teach chemistry, but not analytical chemistry; I can't say that I have studied chemistry thoroughly.

Objection being made by the State to Dr. Claude's being allowed to give his opinion as a chemist of the analyses of Profs. Aikin and Tonry, the Court decided that it had not been shown that he possessed sufficient knowledge and experience to entitle him to be considered an expert, and that therefore his opinion could not be given.

To Mr. Syester—I have not said that my conclusion was that General K. had died of cerebro spinal meningitis; I am not prepared to say positively and decidedly what was his disease; I can't say how many cases of cerebro spinal meningitis have fallen under my observation, but I think about twenty; a considerable number of the cases I saw were fatal; I should say it was at one time epidemic in Annapolis, in 1862; we had then a great number of troops encamped here; there was a great deal of hauling by mule teams, and the roads were nearly impassable; the cases were not, however, confined to sections most cut up by the wagons; I do not recognize any forms of the disease as a difference of the disease; it is all one disease; the term fulminant conveys to my mind only the idea of its sudden invasion and rapidly fatal termination; the first case I saw occurred with vomiting and purging, and I had some suspicion of poisoning; it was proved afterwards by the occurrence of other cases to be one of cerebro spinal meningitis; I think Gen. K.'s case might be called of the fulminant form; my theory is that cerebro spinal meningitis is the result of a poison; I cannot say positively whether Gen. K.'s case was of the inflammatory or fulminate form; in my cases the chill was not a prominent symptom; I can't say it was present at all; I was once poisoned with copper, and the first symptom I had was a chill; all who ate of the food from the same copper kettle had the chill as the first symptom of the poisoning; I have never seen but one case of lockjaw from natural causes; I have seen two cases of tetanus; the nervous centres may be disturbed by either natural or unnatural causes, and no post mortem lesions be discoverable; I incline to the opinion that General Ketchum died from a natural cause, but I am not able to say what was that cause; the effects upon the pupils of the eye in the cases of cerebro spinal meningitis which I saw were very various; I do not know that there was in any of my cases no change in the pupils of the eyes; I have noticed the open and staring expression of the eyes; it is not a constant symptom; there is no one certain symptom which would enable me to diagnose the disease; I do not remember to have seen the open and staring expression of the eye before a convulsion had set in; that expression of the eye would not indicate to me the presence of the disease, if unaccompanied by other symptoms; there

may be suppression of the urine at one stage of the disease and not at another; I did not test the urine, and, of course, cannot say that it was albuminous; I do not remember to have seen hyperesthesia in all the cases I attended, or in the majority; cases of tartar emetic poisoning without lesions are described; tartar emetic has a very decided taste to me; it first tastes sweetish, then biting or peppery, or what is ordinarily described as metallic; the taste is persistent; a man who had taken an overdose of strychnia might move about for a time, but the effects of tartar emetic are quite different; it prostrates the muscular system without exciting it as strychnia; a party might take a medical dose of tartar emetic and yet get up and walk down stairs; what would prostrate one man would not prostrate other; a man might take a dose of tartar emetic and vomit and purge from its effects, and yet not be prostrated; it is recorded that the par vagum nerve was cut from the stomach of an animal, and that afterwards whenever anything was introduced into its stomach it was vomited up; I don't think I ever observed hyperesthesia of the skin more than once, and that was in a case of spinal meningitis—not cerebro spinal meningitis; it was not general, but was confined to the lower extremities; the patient was perfectly conscious; he did not abrade his skin; I think General Ketchum's abrasions of his skin even after he had said the pain was in his stomach, were due more to his want of air than to his pains; I think if an overdose of tartar emetic was in a concentrated solution or in a powder it would probably produce a burning sensation about the throat and stomach of the patient; I can't say whether or not an overdose of tartar emetic would have caused General Ketchum to abrade his skin; I suppose any poison may cause convulsions.

Mr. Syester now read from the 13th volume of the London *Medical Gazette*, edition of 1856, page 7, a case of antimonial poisoning, and Dr. Claude said he had had no such case and could not express any opinion from personal knowledge, and that all he could say was that from his reading he would not have expected such symptoms. Mr. Syester then proceeded to read from the same work of the symptoms of Cook, who was poisoned by Palmer with strychnia, but Mr. Hagner objected, and said it was not a statement of Cook's symptoms. He thought it was an attempt to give the facts in Cook's case, in the guise of cross-examination, and said the statement proposed to be read had no authoritative authenticity, and did not rise to the dignity of a medical treatise. He had never known a book of such a character to be allowed to be quoted from as an authority.

Mr. Steele said the witness should be asked if the authority offered was a good one.

Mr. Syester said, he had his notions about medical books, and he knew that it was easy to get almost any statement into the books, and it was often done by ambitious and not over careful physicians. He then referred to Taylor, and found that he, in his work, which had been over and over cited in this case, referred at some length to the very case about which he had proposed to read from the Lon-