

ment I began to search for antimony I had these results in my mind, and my object was to ascertain if I could get these results from this material; the results would be an orange red sulphide of antimony; that this orange red is soluble in strong boiling muriatic acid; that acid solution dropped into water gives a white precipitate; there are other metals which will give a white precipitate, but the white antimonial precipitate is made orange red by sulphide of ammonium; if it be anything else giving the same white it would be made dark by the same; any substance which under my examination would give me the orange precipitate, the solution of that in muriatic acid, the white product on the addition of water and the re-appearance of the orange red when sulphide of ammonium was last added, must contain some antimonial; I don't know any one thing except an antimonial which could give those results, and as I got all those results in this case from that portion which I examined I could not entertain a shadow of doubt as to the presence of antimony; I took the portion of the material not used in the arsenical process, added to it an excess of tartaric acid, filtered it, and examined the filtrate with sulphurated hydrogen; I got an abundant brownish red precipitate; red brown and brownish red will convey the idea; I used the sulphurated hydrogen just as I have described in the other case; there was no necessity for destroying the organic matter, and I did not use muriatic acid and chlorate of potash; the precipitate I got when separated and dried was dissolved in muriatic acid; I did not use muriatic acid in preparing the material; the hydrochloric solution dropped into water gave me a white precipitate; that white precipitate became orange red when treated with sulphide of ammonium; it was soluble in a solution of tartaric acid; that completed, all that was necessary to satisfy me that I had been dealing with some preparation of antimony; I know nothing that could have produced those results except some preparation of antimony; as the only compound of antimony used in commerce is tartar emetic, the overwhelming probabilities were that it was tartar emetic; the only certainty with me was that antimony was present; tartar emetic is the only preparation of antimony I am acquainted with as an ordinary article of commerce; the amount of antimony present I could only approximate; my attention was not directed so much to the amount as to the character of antimony present; I have never attached any importance at all to the question how much was found in the stomach, except in cases in which things might accidentally get into the stomach are present in very minute quantities; the question of quantity is important when necessary to explain the presence of even minute particles of a substance which may have gotten there accidentally; in my opinion the quantity present could not have been less than twenty grains or more, if you call the compound tartar emetic; the orange red sulphide of antimony is a definite compound; in a given weight there will be, of necessity, a certain weight of metallic antimony and a certain

weight of sulphur; tartar emetic is equally a definite compound; a certain weight of tartar emetic must contain a certain weight of metallic antimony with the other constituents; then it follows that the metallic antimony present in a certain weight of a sulphide of antimony would form a definite weight of tartar emetic, which may be calculated; that calculation gives this result, that ten grains of sulphide of antimony correspond to about twenty grains of tartar emetic; if I decompose exactly twenty grains of tartar emetic by means of sulphurated hydrogen, I would get sulphide of antimony, and the weight of that sulphide of antimony would be about ten grains; not exactly as two to one, but very closely; I would like to have it understood that nobody ever extracted tartar emetic in the form of tartar emetic from the stomach of any dead person; once let it enter into solution, it is beyond the reach of mere mechanical separation; the only evidence of the presence of tartar emetic would be to get evidence of the presence of some antimonial preparation; this is not peculiar to antimony, but is common to all poisons taken into the stomach; I based my estimate of the weight upon observation of the results of another examination; in that observation I was anxious to determine the weight which might be present from the observed weight of the sulphide of antimony; it was by comparing in my mind the quantities gotten in each case that I was enabled to make the approximation; in case I got ten grains in the other quantity of sulphide of antimony, and I thought myself safe in assuming that at least twenty grains of tartar emetic were present; the larger quantity of sulphide I obtained from the stomach; a tumbler containing a sediment was given me by Dr. Chew; he called my attention to the taste of the article; that was on the 30th of June; I put a particle in my mouth and found an unpleasant, biting, acrid, metallic taste, which I did not think resembled the taste of arsenic; to satisfy my mind I got a fragment of white arsenic and a crystal of tartar emetic and compared the taste of all three, the sediment, the arsenic and the tartar emetic; I found the resemblance was between the sediment and the tartar emetic; that was the only tumbler I ever got from Dr. Chew; I was then satisfied that I ought to look for tartar emetic; the color of the sediment was white, and the color of tartar emetic is white; I had in view, starting with that idea, to search for those characteristics of antimony, which I have already given, with this addition, that where tartar emetic is suspected to be present, unmixed with organic matter, it has a certain property which will aid in identifying it; the property is that when acted on by a drop of hydrochloric acid it gives a white precipitate which is soluble in excess of the acid; that experiment satisfied me that I ought to look for tartar emetic; I then proceeded to verify, as far as I could, my suspicion of the presence of tartar emetic; I used the same means employed before to get the orange red solution; about one-half of the original quantity was treated with sulphurated hydrogen, and gave me a precipitate of orange red sulphide of antimony; it was a direct