

June 10, 1938

Dr. J. C. Metts
Savannah, Georgia

Dear Doctor Metts:-

The alleged case of lead poisoning referred to in your letter of June 3rd, is a matter of considerable interest to me. I have had my attention called to it not only through your letter but through information obtained by a representative of the Ethyl Gasoline Corporation. I am glad to give you all the information I can as to the significance of the exposure to lead involved in the work engaged in by the claimant, and I am also sending you some published articles on the subject in which the results of investigations have been reported in support of my statements. However I feel that it will be necessary for me to do somewhat more than to convey this information to you. During the past fourteen or fifteen years, I have made it a point to investigate as thoroughly as possible, all cases of alleged lead poisoning or injury of any kind associated with the handling of gasoline containing tetraethyl lead, in order that I might be informed as to all the results which might be expected, and also that I might be enabled to report to the United States Public Health Service of the observations made. No doubt you realize that it was suspected at one time that persons engaged in handling leaded gasoline might absorb significant quantities of lead in the course of their work, and might thereby develop lead poisoning. The investigations of this laboratory, of the United States Public Health Service, and of the British Ministry of Health failed completely to show any evidence of danger from lead absorption as the result of contact with gasoline containing the commercial quantities of tetraethyl lead. (Incidentally the maximal concentration of tetraethyl lead in gasoline is 1 part in 1260 parts of gasoline, whereas in non-premium leaded gasoline the concentration is rarely in excess of a third or a fourth of this amount.) Moreover during the entire period in which we have been studying this problem and in which we have been investigating complaints of a variety of types, we have failed to find a single case of lead poisoning, nor have we been able to find any evidence that persons with the most severe exposure have actually absorbed lead as a consequence of such exposure. It is, therefore, my very definite opinion

that lead poisoning does not occur and can not occur as a consequence of skin exposure or inhalation of gasoline containing commercial quantities of tetraethyl lead. It is true that tetraethyl lead is capable of being absorbed through the skin when applied in concentrated form, or in high concentrations in gasoline. On the other hand it has been found that dilution in gasoline hinders the absorption appreciably, and when the concentration is as low as 1 part per thousand, lead absorption through the skin is so small as to be incapable of measurement.

The claim of this man, therefore, is unfounded in my opinion. On the other hand it seems quite clear from the information which has been sent to me, that he has some type of neurologic lesion which might be due to lead, but which also might be due to arsenic or other toxic materials as well as to an infectious process. It would seem to me, therefore, that the first step in the determination of the facts in this case would be to have a thorough physical examination with such laboratory procedures as are indicated, so as to be able to make a differential diagnosis. I am somewhat hesitant about venturing into these cases when a suit is involved, since whatever one may do may materially influence the point of view of the claimant, and may prejudice the case in some measure. On the other hand it is very decidedly my duty to make some investigation of this case and I should appreciate it very much if you would give me your advice as to how and when this man might be seen and examined. Frankly I am much more concerned with the facts as to his illness than I will be in the outcome of a suit, but if it should develop that it is possible to make a diagnosis in this case which excludes lead poisoning, I should be quite willing to present our findings in the matter as an expert witness. Moreover I should be quite willing to give such assistance as I can in discussing the case with the attorneys involved, and in preparing the case for a hearing. Unfortunately I am scheduled to go abroad and am sailing on the 22nd of June. Therefore anything which I am to do in this matter will have to be done promptly. Therefore I should appreciate your prompt reply and your advice, after consultation with the attorneys for the defendant, as to how I may proceed to investigate this case. Incidentally any detailed information which you are able to send to me would be greatly appreciated.

Sincerely yours,

RAK:is

Robert A. Kehoe, M.D.

P.S. If for any reason you feel that my presence to investigate this case at once is urgently required, I would appreciate it if you would telephone me at my expense on receipt of this letter. My telephone number is University 2665. RAK.