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SUBJECT:

February 24, 1925.

Dr. R. R. Sayers,
Chief Surgeon, U.S.B. of M.,
U.S. Public Health Service,
Washington, D.C.

My dear Dr. Sayers:

I find that your letter of Feb. 13th
needs some reply. I also wish to acknowledge yours of
the 17th.

I have been out of the city some of
the time. I question whether a review or editorial
for the American Medical Association would be accepted
by any^{one} other than from their regular reviewers and editorial
writers. I am quite sure that my old Professor, Dr.
H. Gideon Wells, Head of the Dept. of Pathology, Univ.
of Chicago, writes the material along this line for the
editorials in the American Medical Journal. Would it
not be well to send him a copy of the Bureau's report
with that suggestion.

As you know I prepared an editorial
for the American Journal of Public Health. Also Dr.
J. H. Shrader of Baltimore has prepared a very good
paper upon the subject. Some of the material in my
proposed editorial was, on agreement, transferred directly
to his paper. Both will be out in the next issue of the
American Journal of Public Health.

I have just received intelligence from
the Workers' Health Bureau stating that Dr. Yandell Henderson
considered their analysis "very good". I have a copy of his
comments in which he states that the main point in which the
report is defective is that the experiments which the report
describes do not apply to real conditions. The animals under
test were kept in an atmosphere containing exhaust gas and
dust only up to 4 parts of carbon monoxide in 10,000, whereas
the atmosphere of public garages at least is often contaminated
to a far greater extent. Therefore garage workers will be
exposed^{to} several times as much lead dust as were the animals
reported in the experiments. Dr. Henderson also states

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that he learns on good authority some additional substance may be added to ethyl gas so as to enable all of the lead to be blown out of the exhaust instead "of caking in the muffler as happens at present". "It is not necessary to question the accuracy of the chemical analyses carried out by the experimenters at the Bureau of Mines Station. Even if these analyses are absolutely correct, the experiments are so poorly planned that they do not apply to the actual problem. In a garage dust accumulates from week to week and month to month. In the experimental chamber at Pittsburgh, on the contrary, the volume of air blown through was so much that no accumulation of dust could occur. In the experiments as carried out the animals were placed in a room through which exhaust gas diluted with a large volume of air was passed. It would have been a nearer approach to real conditions if the exhaust gas had been blown through the chamber for several weeks without putting animals into the chamber. Then when an amount of dust had collected corresponding to that which occurs in a garage the exhaust could have been shut off. The animals could then have been made to live in this dusty room for a few weeks. An experiment of that sort would have approximated real conditions in a garage."

Dr. Henderson also takes exception to a hazard from lead to workers in repair shops and garages which is as great as that now existing for painters in their profession. He states that "you are free to use these statements either publicly or for transmission to the New York Health Council, if you think they will be of use."

A letter which the Workers' Health Bureau received from Dr. Alice Hamilton states that she wonders whether the Bureau had not better wait until they have something more to go on than they have just now. She advises them to see Dr. Emerson and to hear from Dr. Henderson before making any further steps.

It appears to me that the main issues have been overlooked by most of these critics. If we will look back into the history of the question we will find, I think, that the problems to be taken up fell about in the following order:

1. What became of the lead which was put into the motor?
2. Was the public health endangered?

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3. If so, methods of regulating and controlling the danger would have to be worked out.

4. So far as animal experiments went, it was first necessary to determine whether any of them were poisoned by lead and thereafter perhaps to determine the various peculiarities of the poison which the various animals showed. Obviously our experiments have shown this is all a negative question, thus far at least.

5. The danger to the semi-public, that is, garage workers, etc., was the next problem to be determined and has not yet been worked out.

Apparently our critics have dropped the matter of danger to public health.

Please do not call a meeting for Thursday, March 5th. I can make the following week (Thursday), or any subsequent time very conveniently. Tuesday or Saturday is also convenient for me but I understand not so much so for some of the others.

Yours very sincerely,

E. R. Hayhurst

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