

LEGISLATIVE ASSEMBLY ALBERTA

Stony Plain, Alta.
June 26, 1942

Dr. D.H. Arnott,

London, Ont.

While you are considering the agreement regarding the clinical test, there is one other matter which we wish to call to your attention at this time. It is really a matter which should have been discussed personally with you, rather than by letter, but at present we have no option.

We trust that you will understand our position as a Committee in this matter and we know it's very difficult for us to place before you in writing, the Government's position, at least as they see it.

Being a reform Government, in opposition to the old powers, which they feel are always standing ready to slay them at every opportunity, they are fearful that some astute lawyer in the hands of the opposition, might take advantage of this opportunity to build up a political case sufficient to discredit this Government, thereby depriving the people of Alberta, who really want monetary reform as well as this health measure, from obtaining both.

They feel that there is great danger, if the Government of Alberta or the Premier's name is mentioned or implicated in any way in the Detroit trial, that the press would play the matter up in such a manner as to accomplish this very thing. Therefore, they feel that they should have some

definite assurance that none of this correspondence or the agreement shall be used as evidence in the Koch trial. We, like yourself, feel very keenly over Dr. Koch's position, and as far as we, personally, are concerned there is nothing that we would not do to assist him. But as you understand, our responsibilities are not in the same category as the Premier, for his is wholly responsible to all the people of Alberta for any or all of his actions. From your experience with Governments, we know you quite understand how they function.

Soliciting your confidence in this matter and thanking you, we remain,

Yours sincerely,

(Mrs.) C.R. Wood,

Chairman of Committee.

The news reached Willard Dow, and he sent word to Koch that he would help him in every way possible. In a letter, quoted in The Birth of a Science, he said:

"We cannot understand what the Food and Drug Administration is driving at for the reason that all our information to date would indicate that Dr. Koch has been exonerated from illegal practices as far as the Administration is concerned, and as for the mislabeling of packages, like everyone else, it is merely a matter of interpretation rather than wilful violation of the law... Dr. Koch has appeared before the Washington representatives of this Administration and thought the whole matter was straightened out to their satisfaction, but apparently not so. It is strange, because the same procedure is run into

time and again by industry when it is necessary to get a label properly approved before it goes to the public, but in his case it does not seem possible without a trial. He has had no trouble proving his points... It almost sounds as if a certain group is attempting to persecute him unjustly."

(COPY)

James V. Sheridan

April 21, 1947.

1456 Penobscot Bldg.,
Detroit 26, Mich.

D. H. Arnott, M.D.,
226 Queens Avenue,
London, Ontario,
Canada.

Dear Dr. Arnott:

I have been assigned the pleasant task of advising you concerning the nature of the chemical work done by the Dow Chemical Company at Midland, Michigan, on the chemistry of the Koch drugs. I am presuming that you are not interested in all the details of this work but rather in the conclusions reached and the general mode of procedure used in reaching the conclusions.

Our activity started late in 1944. Through the years we have been interested in chemical catalysts, and particularly we were interested in oxidation and polymerization catalysts. We had observed that certain chemical structures within the molecule appeared to be the centre of desirable catalytic effects. Naturally we were interested when we discovered that Dr. Wm. F. Koch of Detroit was using certain chemicals containing these structures and on the same theoretical basis. Our application was in industrial chemistry and Dr. Koch's was in biochemical systems, but our approaches fell into one category.

As you might expect we were somewhat discouraged by the weight of (government) expert opinion against the Koch chemistry. I was particularly impressed by a 1936 American Medical Society publication to the effect that the major portion of the Koch chemistry is "pure nonsense" and that some of the structures are "incomprehensible". We were also advised by this publication that Koch's "associates were not reputed for scientific attainment or for any other reason except the kind of repute earned by association with William F. Koch". Needless to say our chemists leaned over backwards in their proofs in order that we might protect the good name of Dow from such a vigorous assault.

I was placed in charge of the investigation by Dr. Willard Dow and chose first to find out what the specific defects were supposed to be in this chemistry. This can best be treated by separate consideration of each of the Koch drugs.

NOTE: As we in Canada are interested only in Glyoxylide this part of the communication only will be repeated here.

GLYOXYLIDE

Glyoxylide is alleged to be a polymer of the structure



Dr. Koch has testified concerning his process of making Glyoxylide. He has described $\text{O}=\text{C}=\text{C}=\text{O}$ as a gas which he has never isolated per se for the reason that it is so reactive that it immediately polymerizes. The basis of his assumption that $\text{O}=\text{C}=\text{C}=\text{O}$ exists is the fact that it is the only substance which can explain the formation of the particular polymers made. The opposition experts state categorically that there is no such compound, that there are no polymers of $\text{O}=\text{C}=\text{C}=\text{O}$.

The (opposition) experts say that even if these compounds existed they would immediately form glyoxylic acid in contact with water (for the reason that $\text{O}=\text{C}=\text{C}=\text{O}$ is structurally the anhydride of glyoxylic acid).

We submitted some of the Koch Glyoxylide in concentrated form to analysis. The material submitted was in water solution and, therefore, according to (opposition) expert opinion, should have been a solution of glyoxylic acid. We found, however, that the material was, in fact, a polymer consisting of a chain of carbonyl (i.e. $\text{C}=\text{O}$) groups and that the solution contained no glyoxylic acid. In fact, the solution contained no acid of any kind. We failed to detect acid groups even with spectrum analysis.

The Dow chemists who took part in this program testified at the Koch trial held in the Spring of 1946 in Detroit. It is significant that no rebuttal testimony was offered by the Government.

The above information is, of course, a sketchy account of our investigation. The complete evidence is available to anyone interested. As a general conclusion I can say that in every single case where an experiment was possible the results were consistent with the views expounded by Dr. Koch. We have not as yet secured any results inconsistent with those views.

Sincerely,

(signed) J. Sheridan.

The Dow Chemical Co., Midland, Mich.

JVS:VW