CHAPTER 13

THE J.A.M.A. AND THE POWER OF THE GOVERNMENT

The Journal of the A.M.A. takes Credit

When Dr. Koch left Rio de Janeiro in November 1941, he promised to return to Brazil in April of 1942 to continue his research program there. His return was delayed, in part, by the United States entry into World War II and it became impossible to return until after September 1948 due to the Food & Drug Administration's April 3, 1942 fraudulent criminal indictment that was brought against him, his brother Louis, and Koch Laboratories, Inc.

Within a 6 months period, since Dr. Koch's return to the United States from Brazil, at the request of the Food & Drug Administration and within five weeks of his February 27, 1942 meeting with the three top F.D.A. officials in Washington, D.C., that the medical trust took charge. It occurred on Good Friday, April 3, 1942, just two days before Dr. Koch's 57th birthday. Dr. Koch and his brother, Louis Koch, were arrested based upon an indictment founded upon false and fraudulent allegations and misinformation obtained by and for the Food and Drug Administration. The Government alleged that the Kochs and Koch Laboratories, Inc. had violated the Federal Pure Food & Drug Act of 1938 as amended. Within two weeks the Journal of the American Medical Association took personal credit for the F.D.A.'s action. In its April 18th, 1942 article[58] **"KOCH'S CANCER TREATMENT MEETS THE LAW"** the Journal's editor acknowledged how ***"The Journal has repeatedly called attention to the promotion of products by the Koch Laboratories".*** It went on to say, **"Again and again it has urged federal agencies to display an interest in the matter."** Over six years later, on August 17, 1948, the Food and Drug Administration finally dismissed this fraudulent criminal indictment, in which it failed to prove its case, after 2 long, five months trials (1943 & 1946) and the expenditure of over a million tax payer's dollars.

The F.D.A.'s attack on the Koch pharmaceutical products was based on the claim that the Koch labels for Glyoxylide, Malonide and B.Q., were false and misleading and that these medications were not effective in the treatment of any disease. It should be noted that these medications were sold only to licensed physicians in the United States who were qualified to use them. It should be further noted that none of these doctors would have used these medications on their sick patients if they did not work.

WASHINGTON D.C. MEETING

It was on February 27, 1942, at the request of the F.D.A., that Dr. Koch met in Washington, D.C., with the top three officials of the Food & Drug Administration; Mr. George P. Larrick, Frank H. Wiley, Ph.D. and Dr. Robert P.

[58] Current Comment section, J.A.M.A., April 18, 1942, Vol. 118, No. 16, p.1373.

Herwick. At this meeting Dr. Koch explained in detail, to these F.D.A. bureaucrats, the chemistry and theory on how his medications worked. He also presented scientific and clinical proof in support of each of the medications that the F.D.A. had inquired into. He supplied these F.D.A. officials with other documentary information and offered a list of cured patients to the F.D.A. for its inspectors to visit as an additional support to the correctness of the Koch labels. Dr. Koch made an honest attempt to resolve this matter pertaining to the Koch Laboratory labels at that time. Since the matters at issue appeared to be the printed formulas for Glyoxylide and Malonide and the acceptable wording on the labels for Glyoxylide, Malonide and Benzoquinone, this matter could have and should have been resolved at that meeting on the 27th of February, 1941.

It appeared afterwards that these F.D.A. officials were not interested in the truth about Dr. Koch's research and the pharmaceutical products that were being sold to licensed medical doctors only by the Koch Laboratories, Inc. These F.D.A. officials, in reality, were the alter ego of the editors of the Journal of the American Medical Association. The F.D.A. officials really did not want to resolve this matter at that time or anytime unless they were forced to acknowledge their error.[59] It should be further noted that at a prior, 1941, F.D.A. inspection of Dr. Koch's laboratory in Florida, Dr. Koch explained the chemistry of his products to the F.D.A. inspector and at that time gave him a sample of the chemical concentrate of one of his products. The F.D.A. never revealed what tests, if any, its employees did with this concentrated material.

During this February 27, 1942 meeting the following conversations occurred between Dr. Koch and these F.D.A. officials. (extracts from transcript of this meeting)

"Mr. Larrick: 'We have no authority to attack your theory or anybody's theory of the treatment of disease. We are just dealing with these two medicines.' (Glyoxylide and Benzoquinone)

"Dr. Koch: 'I want to show why this is a synthetic antitoxin by its very nature. The carbonyl group has a detoxication effect and it works as an oxidizing agent to accomplish that. I want to show that the carbonyl group is an important thing in catalyzing oxidation of sugar in the body and fat in the body to produce energy for function and growth, and that the carbonyl group is the important group in catalyzing oxidations which protect against poisons.'

"Mr. Larrick: 'In other words, your theory isn't related at all to homeopathy?'

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[59] Subsequent to the start of this A.M.A. inspired criminal action in 1942, Dr. Koch did change his labels on these medication to meet the requirements of the F.D.A. Law and Regulations. In August of 1948, when the F.D.A. asked the trial court to dismiss this indictment against Dr. Koch, Louis Koch and Koch Laboratories, Inc., the Government's attorney used as one of his reasons for dismissing this wrongful indictment was that the new Koch labels used in 1942 did now conform to the requirements of the F.D.A. laws.

"Dr. Koch: 'I might say this – that the dilutions we use are the same as catalysts in living cells....'

"Mr. Larrick: 'But your provings here are not on human...'

"Dr. Koch: 'These are animal experiments. The dilutions were very high in formaldehyde.' (referring to Dr. Koch & Professor Maisin's research at Louvain University)

"Mr. Larrick: 'The only relationship between your theories and homeopathy are the high dilutions? You don't approach your problem as one of homeopathic medicine?'

"Dr. Koch: 'No, but it is homeopathic medicine in a sense because the recovery follows – I have learned this after I worked this out – this recovery process of the first symptoms to come and the last to go, is a homeopathic principle. The recovery process is the same as Hahnemann described over a hundred years ago for the progress of recovery in other disease.'

"Mr. Larrick: 'You were not a student of homeopathy in college were you?'

"Dr. Koch: "No, I was a medical student.'

"Mr. Larrick: 'Do you regard your theory as a part of homeopathy?'

"Dr. Koch: 'Yes, but...'

"Mr. Larrick; 'Do you embrace homeopathy as a ....'

"Dr. Koch: 'That is a difficult thing to answer. Homeopathy involves the proving of a drug by giving it to people to poison them and get their symptoms. I have never done that. I have done some experiments on the production of cancer with carbonyl compound on animals and then curing with this stuff, but I have never used Glyoxylide to produce cancer.'

"Mr. Larrick: 'Could it produce cancer?'

"Dr. Koch: 'I don't know whether it could or not. This has never been proven homeopathically. There is a certain group which I believe is responsible for the production of cancer, and that is the quinone group. I believe that any compound that contains a quinone group or which can be converted into a quinone is able to induce cancer. It is able to produce allergies of other kinds than cancer. I consider cancer with the allergies. However, it depends on the length of time the exposure takes place – the concentrations you use as to whether or not the quinone will produce cancer. Here is vitamin K, a quinone. Some of the sex hormones are very likely to operate as quinones. They produce cancer. I don't say vitamin K produces cancer, but I wouldn't be surprised that if it were used on an animal long enough it would produce cancer with it. My belief is that it is the quinone group, but that has never been proved.'

"Dr. Harwick: 'What is responsible for the specificity of the origin of the carcinoma? Why do you have it originating one time in the stomach and one time in the lung?

"Dr. Koch: 'I have a theory for that which would have to be proven. It would take ten lifetimes to prove some of the basic theories that I have worked out, but they are the best

explanations there are.' (Dr. Koch continued on with a long lecture on cellular physiology and physiological chemistry for the benefit of these three F.D.A. experts.)

During this lecture on cancer and carcinogens. Dr. Koch went on to say:

"All cancer producing substances are oxidizable. We who do not get cancer are exposed and can bum these poisons and we destroy them. That has been my theory from the start."

Dr. Wiley asked Dr. Koch the following question:

"I would like to ask Dr. Koch this – in your Glyoxylide, for instance, you have given the structural formula of the active principle as O = C = C = O. Is it your opinion that that material in solution retains that same structure? It isn't converted to another?"

Dr. Koch answered;

"I think it polymerizes. I don't know how long it stays in solution".

Also during this meeting, Dr. Koch told these three F.D.A. officials about the spectrographic tests on Glyoxylide in 1936 by Professor Harrison at Massachusetts Institute of Technology and that Professor Harrison's report on his research was presented before the proceedings of the Cancer Commission, Province of Ontario. This report was available to the F.D.A. In the last part of Professor Harrison's report of August 3, 1936, he stated:

"A search through the absorption curves given in the International Critical Tables narrowed the possible materials down to a group of a dozen or so. One of the curves most nearly approximating that found was that of glyoxal in water.

"To carry the hunt further than this spectrographically would be time-consuming and costly, since it would be necessary to mix duplicating solutions to reproduce the exact curve found. I assume that you do not require this, since **it seems to me that the evidence points to the probability that the solution is what Koch says it is, or at least the equivalent.**

"You will appreciate that while glyoxal in water gives a curve similar to that of the ampoule material, this does not necessarily mean that the latter is this. It merely gives presumptive evidence that similar molecular bonds are present in the two materials. **My conclusion is that the spectrographic analysis, as carried out so far, makes it appear very probable that the material is what Koch says it is."[60]"**

The F.D.A. officials and chemists knew or should have known by February 27, 1942, if not before that date, that Koch's Glyoxylide was a dicarbonyl with a

[60] See Sheridan letter to Dr. Arnott re: Dow Testimony on the chemistry of Glyoxylide, p. 97.

structure of O = C= C = O and that glyoxal was also a dicarbonyl with a known chemical structure of O = HC – CH = O and **that glyoxylic acid** had a known chemical structure of O = HC – COOH, **was not a dicarbonyl** and thus they knew that glyoxylic acid was **not Dr. Koch's Glyoxylide**. The spectrographic analysis of Professor Harrison proved that Koch's Glyoxylide was a dicarbonyl and thus not glyoxylic acid. If the Government was interested in the truth, the F.D.A. chemists could have and should have performed the same spectrographic tests as Dr. Harrison did at the Massachusetts Institute of Technology to clearly show that glyoxylic acid and Glyoxylide were not the same or identical chemical.

Dr. Koch also said that O = C = C = O would polymerize. Thus it was fraud on the part of the F.D.A. to make its "false claim" that the F.D.A.'s glyoxylic acid was, in fact, the same as or identical to the original Koch Glyoxylide when the F.D.A. knew, or should have known, that this representation was not true. Thus all of the F.D.A.'s biological and clinical tests using its glyoxylic acid were absolutely meaningless. The Government used these fraudulent tests to deliberately mislead the court and jury during the two F.D.A. trials in 1943 and 1946. For the F.D.A. to present its evidence in court based upon this misrepresentation resulted in an outright fraud on the Federal Court, the jury and everyone.

In a similar manner, the F.D.A. used the same procedure to mislead the court by making its claim that Koch's Malonide, with has a formula of O = C = C = C = O, was in fact malonic acid which their chemist knew had a known formula of HOOCCH2COOH. The FDA further knew that malonic acid was not Koch's Malonide. Thus when the F.D.A. agents proceeded to test their malonic acid, as if it were Koch's Malonide, in the same manner as they tested glyoxylic acid to determine its therapeutic effect, they found that malonic acid had no therapeutic activity.

These F.D.A.'s biological tests, using its glyoxylic acid and its malonic acid as its test materials, together with the F.D.A.'s court testimony based upon these fraudulent tests and this fraudulent evidence, was intended to mislead the Court and the jury. Their actions constituted a fraud which fraud they knowingly perpetrated twice on the Federal Court system and the American public in the 1940's. These fraudulent claims have continued to this day.

Subsequent to this February 27th, 1942 meeting, Dr. Koch consulted with his attorney and they made changes in the Koch Laboratories' labels that were in issue to conform with the requirements of the current F.D.A. laws. By 1948, it became obvious to the Government that it was in the wrong. **Thus on August 17th, 1948**, six years later, **the Government's attorney, Mr. Frank X. Morris, recommended the criminal charges against Dr. Koch, Louis Koch and Koch Laboratories, Inc., be dismissed. One of the reasons that he gave to the Court for this dismissal of the Government's indictment was that the defendants, who did business as Koch Laboratories, Inc., were now conforming with the Federal Food and Drug laws in marketing their products. The Federal Judge in charge of this case forthwith dismissed this**

indictment.

These two questions should be answered by the Food & Drug Administration: 1) Why did the F.D.A. refuse to resolve this matter on February 27, 1942 at the meeting with Dr. Koch and save the tax payers over a million dollars? and 2) What part did the editors of the American Medical Association play in the Government's refusal to resolve this matter on February 27, 1942?

It appears that from the start, these F.D.A. officials had no interest in resolving the alleged disputes involving these labels or to permit any changes be made to these labels to meet with government's interpretations as to the requirements of the Food & Drug Law. Their sole purpose and intentions were to have this official meeting on February 27, 1942 just before the government started its pre-planned criminal prosecution of Dr. Koch, Louis Koch and Koch Laboratories, Inc. By bringing this criminal indictment so quickly, the F.D.A. was successful in preventing Dr. Koch from returning to Brazil to continuing his research there as well as his scheduled trip to Canada to do additional foreign research that had been preplanned by Dr. Koch and Dr. Arnott.

Though Dr. Koch wanted to give his cancer treatment to the world in 1919, he could not do this until he had completed the basic research and development of his discoveries which takes time. **This required the accumulation of the supporting scientific proofs to satisfy the scientific community of the correctness of his theories and the verification of the effectiveness of his treatment for cancer with the hundreds of clinical tests.** Dr. Koch had hoped to accomplish all of this with the help of the local medical community starting in July of 1919. His cancer research to that date was very promising but he had not completed it and it was not yet ready for full publication. Likewise, he did not want to be forced to turn control of his discoveries and research over to any special interest group in Detroit or Chicago or anywhere else. This was his scientific discovery that he had worked many years to develop and he had the full right to complete his cancer research and to receive the recognition for his research before he gave it to the world.

Do to the opposition by "self interested" persons in the medical community in the United States, it became necessary for Dr. Koch to go to England, Europe, Canada and Brazil to demonstrate his discoveries and conduct additional experimental medical research that he wanted to do during his lifetime where he would be free from medical tyranny in the United States of America. In these foreign countries, this U. S. opposition still tried to prevent him from demonstrating his cancer research and treatment; i.e., Dr. Francis Carter Wood, a government witness for the Food & Drug Administration, was just one example of such interference. Dr. Wood, in 1943, was forced to acknowledge in court, under oath[61] on cross examination by Dr. Koch's attorney, that he (Dr. Wood) tried to dissuade Professor Maisin from working with Dr. Koch in the 1930's. In 1946, during the second F.D.A. trial, Dr. Wood did not return as a government expert witness for obvious reasons. In the 1950s and 1960s other attempts were

[61] See page 92.

also made to interfere with Dr. Koch's research in Brasil.

THE FRAUD OF THE FOOD & DRUG ADMINISTRATION

The Food and Drug Administration's April 1942 legal action (above mentioned criminal indictment against Dr. William F. Koch and Koch Laboratories, Inc.) was an attack on Dr. Koch's treatment for cancer and its allied diseases based upon the misinformation of a certain editor of the J.A.M.A. and others. The first jury trial in 1943 ended after nearly 5 months of expert medical testimony by twenty five doctors and many cured patients on behalf of Dr. Koch in support of the effectiveness of his treatments. The highlights of the day to day court testimony was reported each day in the three daily news papers for everyone to read. Since the F.D.A. was unable to prove its case to the full satisfaction of the jury, at the time the trial came to an end, this jury was unable to reach a verdict and they were dismissed after a prolong deliberation of the evidence presented in court.

During the first trial, the F.D.A. did have an opportunity, and legal duty, to present to the court and jury favorable evidence in the support of the therapeutic effect of Koch's Glyoxylide in the treatment of a cancer patient. This withheld evidence, that the F.D.A. and its attorney chose to withhold from the court and jury, would have totally discredited the Government's case. This evidence that was favorable to the defense was based upon the F.D.A.'s personal investigation of one of Dr. Mantor's cancer patients, Mr. William J. Schultz, who had been diagnosed with inoperable carcinoma of the stomach by the experts at Mayo Clinic on May 24, 1941.

During the 1943 trial, the deposition of Dr. H. E. Mantor was read into evidence. He reported on the successful treatment of one of his cancer patients, Mr. William J. Schultz, of Hanover, Kansas. Mr. Schultz had a history of ulcerated carcinoma of the stomach. On May 24, 1941 an abdominal exploration operation was performed by Dr. Walters and Dr. Philip W. Brown at the Mayo Clinic. **Their final diagnosis was Carcinoma of the stomach (inoperable)**. Mr. Schultz was sent home to die since there was nothing more that doctors at Mayo Clinic could do for him. On June 16, 1941 Dr. Mantor gave Mr. Schultz an injection of 12X dilution of Glyoxylide. Subsequent to his treatment with Glyoxylide, Mr. Schultz requested that Dr. Brown send a report of his diagnosis and prognosis to Dr. Mantor for his medical records. In October of 1941, Dr. Mantor received the following letter from Dr. Brown in which Dr. Brown wrote:

MAYO CLINIC

Rochester, Minnesota

October 13, 1941

Dr. H. E. Mantor

Sidney, Nebraska

Dear Dr. Mantor:

Mr. William J. Schultz of Hanover, Kansas, asked that we send you a report, and the following is a copy of the letter which Dr. Walters wrote to Dr. Hurtig on May 28, 1941. As you will see by this report, the situation certainly looked none too favorable and it is gratifying to know that Mr. Schultz says he is feeling fairly well at this time. Both Dr. Walters and I would appreciate hearing from you if there are any additional findings in his case.

"I operated on Mr. Schultz on the twenty-sixth. There was a carcinoma forming a mass about 10 Cm. in diameter on the posterior wall in the fundic end of the stomach with invasion of the pancreas. There were several enlarged, apparently involved, nodes along the aorta. The condition was inoperable and the wound was closed as an exploration.

"Mr. Schultz withstood the exploration satisfactorily. We are very sorry, indeed, that the lesion proved to be inoperable. While we fully realized the seriousness of the patient's condition, we are disappointed that we were not able to accomplish something that would afford him at least a measure of relief."

Yours very truly,

Phillip W. Brown, M.D.

Dr. Hurtig, Mr. Schultz's doctor, had arranged for radiographs to be taken of Mr. Schultz's stomach on May 12, 1941 at the Tyler Clinic in Omaha, Nebraska. These X-rays showed the extent of the cancer condition on that date. This was just prior to the time Dr. Hurtig referred Mr. Schultz to the Mayo Clinic for medical treatment. While the first FDA trial was going on in Detroit, in the spring of 1943, the F.D.A. sent its agents to Dr. Hurtig and had him send Mr. Schultz back to the Tyler Clinic for up to date radiographs to determine the current state of his cancer condition and for a full report on his condition at that time for the F.D.A.. When these F.D.A. agents found out that Mr. Schultz was recovering from this inoperable cancer condition and that these radiographs proved the therapeutic effect of the Glyoxylide treatments, they reported this information to their F.D.A. superiors. The F.D.A. agents responsible for the prosecution of this federal criminal action in Detroit against Dr. Koch, and their federal prosecutors, jointly elected to withhold this important medical evidence from the court, the jury and from the defendants. This evidence would have clearly vindicated Dr. Koch, his research and his treatment. A vindication of Dr. Koch and his cancer research and treatment is just what the government and its co-conspirators did not want to happen. The F.D.A. wanted to win its case on fraud and it would not let anything stand it its way. The F.D.A. and its attorneys were unhappy when all of the jurors would not accept the F.D.A.'s fraud as the truth and would not find the defendants guilty of violating the new F.D.A. law.

On June 14, 1943, the DRUG TRADE NEWS, New York, N.Y. had a front page article titled:

FDA Bested In Koch Case; 153 Witnesses Were Called

WASHIGTON – After a trial lasting more than four months—the longest food and drug trial on record—the Food and Drug Administration recently lost in its attempt to convict Dr. William F. Koch and Koch Laboratories. Inc., Detroit, of misbranding.

The trial was notable in several respects, principally its length. It started January 12 and ended May 28 when the jury in U.S. District Court reported inability to agree on a verdict. Poll of the jury showed its stood nine for conviction, three for acquittal. The jury was given the case May 19 and continued its deliberations until May 28, when it finally reported to Judge Ernest A. O'Brien that it was hopelessly deadlocked. The government introduced testimony from 49 witnesses, the defense from 104, many being among the most distinguished medical men in the United States.

Officials Are Disappointed

FDA officials were visibly disappointed at the outcome of the trial. They regarded the case as of great importance. No decision has been made yet as to whether another attempt at conviction of Dr. Koch, a physician and former teacher at Detroit College of Medicine, will be made. Charges against Dr. Koch involved alleged misbranding of 'Glyoxylide,' recommended for allergy, cancer and infections, '1-4 Benzoquinone' for infections and their sequelae, and 'Malonide,' an anti-allergic. All are sold in ampuls to doctors.

From the above article, one can see how important it was to the Food and Drug Administration, in cooperation with organized medicine, to obtain a conviction in this case. The unethical tactics used by this governmental agency together with the aid of the federal prosecutors who represented the F.D.A. in court illustrates how far this governmental agency was willing to go to get a conviction in court no matter how wrong they were and how unjust its cause was.

It should be noted that as a part of the defense's case, Dr. Koch's attorneys, on February 25, 1943, made an offer of testimony by Cash Asher, from Davenport, Iowa, a former reporter for the Detroit Free Press from 1925 to 1930. Mr. Asher had been hired to investigated Dr. Koch and his Cancer Treatment, in 1929, by the Chairman of the Cancer Committee of the Wayne County Medical Society.[62] This Chairman was looking for and he had expected to receive a negative report on Dr. Koch's medical practice and his treatment for cancer. After reading Mr. Asher's report, the Chairman became very upset and suddenly destroyed it, because this report had vindicated the medical practice of Dr. Koch and the Koch Treatment. Although the testimony of Mr. Asher was

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[62] See "A Newspaper Reporter's Investigation", p.43.

taken in the absence of the jury, the jury was never allowed to hear one word of his testimony at any time.

BETWEEN THE TRIALS 1943 –1946

In August of 1944, Mr. Irving Long, attorney for Dr. Koch, received the following letter from Mr. W. B. Simmons, Chief Inspector, Central District, Food And Drug Administration:

FEDERAL SECURITY AGENCY
FOOD AND DRUG ADMINISTRATION
CHICAGO, ILLINOIS

August 3, 1944

Voorhies, Long, Ryan and McNair
2046 Penobscot Building
Detroit 26, Michigan

Attention: Mr. Irving Long:

Re: U.S. vs. William F. Koch, et al.

Dear Sirs:

As you are the attorney of record in this case, we are addressing you in this matter.

In preparation for the retrial of the above identified case, the U. S. Food and Drug Administration desires to purchase 15 ampuls each of Glyoxylide, Benzoquinone, and Malonide in the same dilutions as the samples involved in the indictments: 10^{12} for Glyoxylide, 10^{6} for Benzoquinone and 10^{12} for Malonide.

As you are familiar a similar request was made prior to the first trial but the samples could not be accepted under the restrictions and conditions imposed by Dr. William F. Koch at that time.

The samples which are now being requested will be employed in treating animals and human subjects, and for comparison with other tests which have been completed, and all of the resultant data will be presented at the coming trial. If Dr. Koch so desires, it may now be possible to arrange for him to be present when some of the tests are conducted.

Your prompt attention to this matter will be appreciated. The writer will be in Detroit until Saturday, August 5, 1944, and can be reached care of Mr. John C. Ray, Assistant U.S. Attorney. If it is not possible for you to reach me before the latter date then please write me at 1222 Post Office Building, Chicago, Illinois.

Respectfully,

(Signed) W. B. Simmons

W. B. Simmons,

Chief Inspector, Central District

On September 1, 1944, Dr. Koch sent the following reply to Mr. Simmons letter.

September 1, 1944

W. B. Simmons, Chief Inspector

Food and Drug Administration

1222 Post Office Building

Chicago, Illinois

Dear Sir:

Replying to your letter of the third of August addressed to my attorneys, Voorhies, Long, Ryan and McNair, in regard to tests which you desire to make in the treatment of certain forms of diseases by the use of my medicines, I wish to advise as follows:

You have been shown ample evidence of the therapeutic quality of the drugs, both in the last trial and in the evidence before the Federal Trade Commission. Many patients who received the drugs have testified and physicians have shown their satisfaction in the use of the drugs. Your representatives have interviewed hundreds of patients and physicians and know the facts concerning experience in the use of the preparations. These physicians have used the preparations with the care and skill necessary to obtain beneficial results, and have informed you of their experiences either by personal interview or by evidence from the witness stand. I have even learned of check-ups which you have made upon patients with the expectation of finding that their recoveries have been imaginary, and that you were unwilling to place before the court the facts learned regarding their efficiency. While the law trial was in progress, you arranged with Dr. Hurtig of Hanover, Kansas, to take William J. Schultz to x-ray specialists in Omaha for fluoroscopic and x-ray examinations to compare with their findings prior to the giving of our treatment. **When you learned from these specialists that their findings were favorable to us you did not present them to the court, as I think should have been done had you sincerely desired that the**

court and jury should know all relevant facts. I am, therefore, led to believe that I cannot trust your willingness to proceed along lines of a fair and impartial investigation.

I already have many obligations ahead of me that take up all of my time for a considerable period both in my own practice and in demonstrations already contracted for and I am, therefore, not in a position to train those you wish to use this treatment to a degree of efficiency that would be required for fair demonstration work. For that reason I advise you to study closely the testimony already given by physicians who have used the treatment and whose observations cover a long period of time, the value of which you certainly should realize.

Sincerely yours,

(signed) Wm. F. Koch

WFK:VW

Between 1943 and 1946 Dr. Willard Dow and Dr. William Hale, of the Dow Chemical Company, became interested in Dr. Koch's scientific research in the chemistry of the free radical. Dr. Koch's knowledge on free radical chemistry had become of utmost importance to the new plastic industry. He was able to share with the Dow Chemical's research chemists his information on free radical chemistry. With the help of the Dow Chemical Research Laboratories and their scientific equipment, Dr. Koch was able to prove, in court, the correctness of the chemistry of the product he had developed. During the five month, 1946 second jury trial of this case, in addition to having the support of many medical doctors, cured patients and other expert witnesses who testified on the curative value of the Koch Treatments, Dr. Koch also had the support of the Dow scientific experts. They testified in support of the identity of the chemical structures for Glyoxylide and Malonide, two of the drugs that had been developed and used by Dr. Koch in the treatment of certain diseases over the years.

The F.D.A.'s fraud did not stop when the first trial came to an end. One of the official F.D.A. publications, that had been released to the public, contained a picture of an ampoule with an attached label and the following false and misleading statement. It said:

Glyoxylic Acid – 1.32 parts

Water – 1 trillion parts

(Equal to a solution of O=C=C=O of dilution 1×10^{-12})

and

Official samples of Koch Cancer treatment were labeled as containing 1.32 parts of glyoxylic acid to one trillion parts water, but analysis could find only water. Dated: *1/4/44* Signed: *Frolik*

The F.D.A. officials knew that this officially released information was fraudulent and misleading, yet they were out to "brainwash" the American public before the second trial that was about to come up soon. They were fully aware of Dr. Koch's research and his use of homeopathic dilutions. Had these so called F.D.A. "experts", who had prepared this generally circulated publication for the public, referred to Professor Maisin published research, they would have understood the principal of high dilutions, as for example: catalysts and enzymes. These F.D.A. officials already had knowledge about Professor Maisin's research and his scientific support of Dr. Koch. In 1938, Professor Maisin had already published the following statements in reference to his research with Dr. Koch's therapeutic medications:

> **"Actually, our best results have been obtained with dilutions from 1 x 10^{-9} to 1 x 10^{-18}. These very high dilutions (1 x 10^{-18}) still contain several thousand molecules per cc."**

and

> "The results obtained are clear, and can be repeated easily by anyone wishing to do so. They are obtained with doses of extremely high dilution, which serves to prove that the active substance can act when exhibited in extremely small traces, as do catalysts, or enzymes. The injections have a lasting action, and do not often have to be repeated, which is an advantage from the patient's point of view. **The treatment is absolutely harmless.** We have given several thousand injections without the least untoward incident, except that some may have a passing malaise, due to a fall in the blood pressure. It is still too early to be able to say with certainty exactly how these substances act, but we know already with certainty that peroxide of diformaldehyde has a deep and prolonged action on the catalase of the blood.
>
> **"There is no doubt that we are dealing with new phenomena, which deserve to be carefully investigated, and whose application in therapeutics appears to us to be of interest.**
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> "This work is not finished, but is leading us to believe that these two substances are not alike in their action. Finally, a curious fact which we have proved and one which we would stress, is the lengthy effect produced in a large number of cases, as well as **the prophylactic action which we have proved the peroxide of diformaldehyde to have on benzpyrene cancer produced in white mice."**

In fact the F.D.A. has had available to its experts over the years, if they really were interested and wanted this information, all of Dr. Koch's publications, books, lectures, his published research papers, etc that explained his theories, catalytic dilutions, the chemistry of his products and how these products functioned in the body.[63] If the F.D.A. officials had been honest government

[63] See section on REFERENCE MATERIAL AND RELATED INFORMATION

employees and had not bowed down to the pressure of the editors of the Journal of the American Medical Association in 1942, this fraudulent prosecution of Dr. Koch, Louis Koch and Koch Laboratories, Inc. would not have been started.

Further, if the F.D.A. officials really wanted more information on how to manufacture these products, they had the right to personally observe the actual manufacturing process. This they never did. The F.D.A. experts and employees knew in advance that their glyoxylic acid and malonic acid, that the government had used in its testing procedures, were not Dr. Koch's products. They also knew in advance that the government's substituted medication did not have any therapeutic activity. Furthermore, there is no record that the F.D.A. scientists ever used the concentrated Koch material for testing that Dr. Koch had given to F.D.A. inspector, Edward L. Homes, in January 1941 at the time of his inspection of Dr. Koch's laboratory in Delray Beach, Florida. This concentrated material was given to the F.D.A. prior to the time the F.D.A. started to prosecute its criminal action. The government based its prosecution on bureaucratic ignorance, outright fraud and political pressure from organized medicine in the United States.

COURT TESTIMONY ACKNOWLEDGING SUBSTITUTIONS

Dr. Frank H. Wiley, Chief of the Chemical Section of the F.D.A., who was present at the meeting with Dr. Koch on February 27, 1942, acknowledged in court that the Government diluted glyoxylic acid to make the Government's "claimed" version of "Koch's Glyoxylide" and that malonic acid was the government's "claimed" version of "Koch's Malonide". Dr. Wiley further admitted, on cross-examination during the trial, that he was not an expert on the efficiency of (homeopathic) high dilutions. Dr. Henry Welch, head of the Bacteriology Division of the F.D.A., in his testimony claimed that the Government's version of the Koch preparations were useless. Fraudulent products are always "useless." The F.D.A. knew in advance that the chemicals it was using were "useless" that and that is why the F.D.A. substituted their glyoxylic acid and their malonic acid for Dr. Koch's products. Both Dr. Wiley and Dr. Welch testified as government expert witnesses in the 1943 and the 1946 trials. During the three year period, between these trials, the F.D.A. never corrected this fraudulent representation, but rather continued to use glyoxylic acid and malonic acid as its official test material, calling these chemicals the Koch medications. This was prosecutorial fraud on the part of the F.D.A. and its attorneys.

During the second trial, the government made no attempt to rebut the Dow expert testimony concerning the chemistry of Dr. Koch's medications. Likewise, the government presented no testimony to rebut the official scientific research that was conducted with cattle, using Glyoxylide, in British Columbia during the 1944 –1946 experiments. The second trial jury was also dismissed, after a prolonged (over 36 hours actual jury time) deliberation of the evidence presented in this case and after one of the jurors became so ill that he could not carry on..

On August 17, 1948, the FDA finally dropped its unfounded charges against Dr. Koch, Louis Koch and The Koch Laboratories. The Government attorney gave as one of its reasons for the Food & Drug Administrations dismissal of these unfounded charges against the defendants was that **the defendants were "now conforming with the Food & Drug Laws in marketing their products".** This fact was reported in the Detroit newspapers on that day.

CREDIBILITY OF THE F.D.A.?

After the two trials were over and after the F.D.A. dismissed their unfounded criminal action against Dr. Koch, Koch Laboratories, Inc. and Louis Koch, in August 1948, the F.D.A. never let up on its fraudulent misrepresentation to the public as to true chemical identity and therapeutic activity of Dr. Koch's treatment for cancer and its allied diseases. To illustrate this point, one should read F.D.A. publications and articles over the years including articles by Wallace F. Janssen, F.D.A.'s former information chief and historian. In Mr. Janssen's article "***The Cancer 'Cures':*** *a Challenge to Rational Therapeutics*",[64] Mr. Janssen titles one section of this article as: **"The Koch Treatment—Distilled Water".** I quote the following from his article:

> "The great cancer swindle of the 1940's and early 1950's, and one of the greatest medical hoaxes of all times, was promoted by William F. Koch, M.D., of Detroit.... Dr. Koch's treatment was a bonanza. Analysis showed it to be distilled water of extraordinary purity, but Dr. Koch claimed it contained 1 part of its alleged active ingredient, the chemical glyoxylide, in 1 trillion parts of water! A Federal prosecutor said this dilution was like dumping a cocktail into the Detroit River and expecting to get a kick from the water flowing over Niagara Falls. There was no evidence that glyoxylide had any therapeutic effect. But a great many people believed in it -— over 3000 health practitioners across the nation paid $25 per ampul for it,...
>
> "I 1943 the FDA prosecuted Dr. Koch. The trial lasted 18 weeks. Forty-three expert witnesses testified that the Koch products were misbranded and not effective in the treatment of cancer or any other disease.[65] The defense had 104 witnesses who said the products were efficacious in the treatment of 69 different diseases, from acute appendicitis to *herpes zoster*, with special emphasis on cancer, tuberculosis, and coronary thrombosis. After 9000 pages of testimony (2 250 000 words) the case went to the jury, which deliberated 8 days without reaching a verdict, and was dismissed.

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[64] Analytical Chemistry, Vol. 50, No. 2, February 1978, pp198A –199A

[65] Please note that the FDA based its prosecution on its fraudulent produced glyoxylic acid for Glyoxylide and malonic acid for Malonide. This FDA fraud was proven during the 1946 trial by the research and testing of the Dow chemical expert chemists.

"Dr. Koch was tried again in 1946, but after five months a juror became ill and a mistrial was declared."

At other times the F.D.A. falsely published the following:

"Official samples of the Koch cancer treatment were labeled as containing 1.32 parts of glyoxylic acid to one trillion parts of water, but analysis could find only water."

Like a cancer, these fraudulent misrepresentations have appeared in other medical publications. In *Everyone's Guide to* **Cancer Therapy,** How Cancer Is Diagnosed, Treated, and Managed Day to Day contain the following false statement identifying "Koch's Glyoxylide" as distilled water.[66]

"Koch's Glyoxylide (distilled water) cure of the 1940's..."

The credibility of the F.D.A., and its employees, was put in issue before Congress in 1959 – 1960 during the Kefauver Senate Hearings that investigated the Food & Drug Administration and the Drug Industry and the improper collusion that occurred between certain F.D.A. employees and certain drug interests. This investigation identified Dr. Henry Welch[67] as the person who was reported to have been required to leave his office in disgrace because of a conflict of interest that involved him and the drug industry. **The Senate Investigation had shown that he had accepted pay for editing two privately-owned journals financially dependent on the drug makers at the same time that he was being paid by the Government as chief of the antibiotic division of the F.D.A., to judge drugs. Dr. Welch's income outside of the Government exceeded $285,000.00. Although Dr. Welch's chicanery was part of one public official's misbehavior, the same Senate record had spread upon it a story in which he was only one of many characters – a story that casts doubt on the conduct of the whole Food and Drug Administration.** This information was reported in the Saturday Review article of July 2, 1960, p. 37-43: "*DRUGMAKERS AND THE GOVT.-WHO MAKES THE DECISIONS*?" The article asked the question: "Who makes the final decision – the government or the drug makers?" We might ask this same question today in reference to the "Rezulin" matter where it has been reported that over 30 people died from a liver condition after taking this medication for type 2 diabetes. Would the F.D.A. like to experiment with the real Koch Treatment on Type 2 diabetes? Wouldn't it be wonderful for a diabetic patient if the F.D.A. found that the Koch Treatment was efficacious in this condition? One might add a second question: Who makes the

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[66] First Edition, 1991, p.93; Second Edition, 1994; and Third Edition, 1997, p. 108.

[67] This is the same Dr. Henry Welch who testified as an F.D.A.'s expert bacteriologist for the F.D.A. in the 1943 and 1946 trials against Dr. Koch. How credible was his testimony and the other F.D.A. expert witnesses considering the above investigation of the F.D.A.?

Why does the FDA fight vitamins with guns?

On the morning of May 6, agents of the Food and Drug Administration burst into the Tahoma Clinic in Kent, Wash. King County police officers, guns drawn, led the way. They carried a search warrant authorizing them to seize everything in sight, especially vitamins.

A reporter for the Seattle Post-Intelligencer covered the story. Julie Gallegos, a medical assistant at the clinic, said the officers "came in with their guns pointed at us and told us to freeze." Receptionist Marge Murphy said the FDA agents were wearing flak vests. "They broke through the main door yelling, and one of them pointed a gun in my face."



Dr. Jonathan Wright, owner of the clinic, arrived a few minutes after 9 o'clock. FDA agents permitted him to make one telephone call to his attorney. Then, pursuant to a search warrant obtained by FDA agent Spencer Morrison, they began their search and seizure.

The Seattle Post-Intelligencer editorially termed the raid a "Gestapo-like tactic" and questioned the FDA's motivation. It was a good question.

In August 1991, Dr. Wright brought suit against the FDA for seizure of his supply of an injectable B-vitamin complex. On Sept. 23, 1991, FDA agents began searching the clinic's trash for evidence of vitamin products imported from Germany. They found packaging from the hateful vials.

The search warrant authorized the agents to seize all drugs labeled in a foreign language and to confiscate all literature describing or promoting the subject compounds.

The FDA was further to seize all documents, "including patient records," that related to dispensing the vitamin products. The agents were to haul away "address books, correspondence, diaries, Rolodexes, telephone toll records, telephone messages and message books, and such other records as reflect communications" between the clinic and its suppliers.



Dr. David Kessler

A final catchall provision of the warrant covered confiscation of "all additional records, whether they be in the form of documentary records, magnetic disks, hard disks, or maintained in any other form." Just as the raid began, a computer specialist arrived to train employees. Agents ordered her to dismantle the computer so the hard drive could be removed and taken away.

A particular object of the FDA's raid was a diagnostic device called Interro. Dr. Wright uses the device to identify allergens that affect his patients by measuring the skin's response to various substances. He finds the method easier on patients than the traditional method of pricking the skin. The FDA has not approved the device.

The FDA's position is that it is protecting the public from itself by seizing vitamins and other food supplements that are provided by doctors practicing holistic medicine. Dr. Wright received his M.D. from the University of Michigan after undergraduate studies at Harvard. He is 47 years old. He practices holistic medicine, a field in which reliance is placed upon compounds drawn from natural materials.

In the agency's view, such substances are probably ineffective and may be unsafe. It is the FDA's duty to see that no unauthorized drugs or medicines are made available to anyone except through controlled studies.

In this fashion, the FDA protects four million victims of Alzheimer's disease by preventing them from obtaining a palliative drug called THA/Cognex. Overwhelming evidence demonstrates that the drug works for many patients. In a tiny minority of test subjects, it has caused an adverse reaction in the liver, but the reactions were never fatal and were easily reversed.

Dr. Wright's 1,200 patients obviously believe his holistic methods help them. Hundreds of Alzheimer victims say the same thing of THA/Cognex: The drug may not help every victim, but it clearly helps them. Such evidence is not merely anecdotal. It is solid evidence, but the FDA looks upon the victims with a cruel and indifferent eye.

I hold that in a free country, the government has no business drawing guns upon people who want to take or prescribe unauthorized vitamins. Our bodies are our own. They do not belong to Dr. David Kessler, commissioner of the FDA. His powers ought to be strictly limited to protecting us from fraud, contaminated foods and truly dangerous drugs.

Dr. Kessler's view is that he needs still more sweeping powers of enforcement. U.S. Sen. Edward Kennedy, D-Mass., has sponsored legislation to that effect. The senator would protect us from "worthless" products.

Some of us might prefer to be protected from worthless commissioners.

Universal Press Syndicate

Detroit Free Press June 16, 1992

Walter Williams
Creators Syndicate
5777 W. Century Blvd.
Suite 700
Los Angeles, Calif. 90045

Detroit Free Press 5/15/96

OTHER

Reforming FDA would save lives

Development of the coronary stent, a wire-mesh tube placed in an artery to increase heart-muscle blood flow, has revolutionized treatment of certain heart conditions. The device reduces the need for coronary-bypass surgery and is especially valuable during angioplasty when a coronary artery collapses and prevents blood flow to the heart.

WALTER WILLIAMS



According to a report by David Murray, a scholar at the Indianapolis-based Hudson Institute, the Gianturo-Roubin coronary stent was developed in 1986, but the U.S. Food and Drug Administration didn't approve its use until 1993.

We want medical device manufacturers to demonstrate safety and effectiveness. We don't want the FDA arrogance, delays and bureaucratic bungling that are responsible for the United States lagging 11 months or more behind Europe's device-approval rate. FDA ineptitude doesn't simply impose time-wasting, costly procedures on device manufacturers; each year, it kills thousands of Americans.

Approximately 15 percent of patients die undergoing emergency bypass surgery made necessary because of coronary artery collapse during angioplasty. During clinical trials of the Gianturo-Roubin stent, far fewer patients needed bypass surgery after a coronary artery collapsed, and of those who did, only 5 percent died. Murray says roughly 1,230 American lives per year were lost in angioplasty procedures because of FDA-delayed approval of the stent.

If you know someone who died in the early '90s during an angioplasty procedure, Dr. David Kessler, the head of the FDA, is in part responsible. Your loved one is one of the many invisible victims of FDA policy.

Here's the modus operandi: If FDA officials mistakenly approve a device that has unanticipated harmful effects, their necks are on the chopping block because the victims are highly visible. Career-minded FDA officials don't like that kind of exposure. They prefer the hidden mistake, erring on the side of overcaution by needlessly delaying approval.

When FDA officials err on the side of overcaution, their victims are invisible. After all, you didn't know there was a device available that could have saved a loved one's life, as would have been the case had the angioplasty procedure occurred in Belgium or some other European country.

FDA delays in approval of the Omnicarbon heart valve contributed to the suffering or death of as many as 8,000 of the 16,000 Americans who experience either a thromboembolic event or bleeding complication with their artificial heart valves each year. Again, these people are the invisible victims of the FDA.

Many medical devices, or improvements to existing devices, are needlessly held up each year because of self-serving, byzantine FDA procedures. The medical profession shares some of the blame. Doctors are at least partially aware of the introduction of new tools in their profession. I think they have an ethical duty to inform patients about lifesaving and suffering-sparing devices and useful drugs needlessly held up by the FDA.

The problem is not resources. In 1988, the FDA's budget was $482 million and it was staffed by 6,869 people. That year, it approved 46 applications for pre-market approval of medical devices. By 1994, with a budget of $877 million and a staff of 8,539, it managed to approve only 26 applications for pre-market approval of medical devices.

The FDA is long overdue for an overhaul. In the process, Congress should allow for private medical device certification. After all, Underwriters Laboratory does an excellent job assuring electrical device safety.

PETITION

to the

Congress

of the

United States of America

for an

Investigation

into

Organized Medicine

134 East 65th Street,
New York, N. Y.

HONORABLE JAMES W. WADSWORTH, et al,
MEMBERS OF THE HOUSES OF CONGRESS,
Washington, D. C.

Dear Senator:

Forgive my addressing you as Senator, but to one who has known your distinguished record in both Houses, it is difficult to think of you as otherwise, and then you may recall that my brother was Secretary of the Military Affairs Committee of the Senate when you were its Chairman, during the last war.

I am sending this letter to Congress through you because of the utter dearth of political contacts which I possess, and from the fact that we have seen eye to eye on more than one matter of national importance in the past.

When President McKinley appointed me as Aide to the Commander of an expedition which was to take forty members of Congress on a Tour of Inspection of the then recently acquired Philippine Islands, with the charge that I was to see that every wish of our distinguished voyagers was gratified, I might have claimed some influential friends today within our ruling bodies after that long trip around the Horn, had I fulfilled my duties successfully, and had not the transport turned turtle in the Brooklyn Navy Yard two days before we were to set sail. As it is, the strength and cogency of my presentation alone must claim the consideration which it deserves.

Last Spring, my interest in the persecution of Doctor William F. Koch of Detroit, and other flagrant practices of organized medicine, was called to the attention of Congress through the forwarding of a copy of a letter to its members, which I had addressed to the Honorable Paul V. McNutt, under date of May 19th, 1942. It is in pursuance of that letter, together with other pertinent matters presented herein, that I wish to call to the attention of Congress and petition that some form of investigation be instituted.

I recognize the difficult situation in which a layman places himself in daring to criticize the unassailable, the unknowable, the infallible position which Medicine holds, but I am taking my chances in the hope that in so doing I may be of some little service to humanity. My interest in this matter, may I state, originated in the active part I took for the hospitalization of our disabled veterans, and for the formation of the Veterans' Bureau, after the last war, and has continued on in a more or less mild degree ever since.

In the first place, it seems very wrong to me that agencies of the government should be made to serve the special interests of organized medicine, with its galaxy of dependent satellites, as is evidenced in the prodigious effort that is being put forth to convict Doctor William F. Koch, and his brother, Mr. Louis Koch, at what must be a great cost of time and energy in these days when time and energy are so important to the prosecution of the war.

Arrested during the first part of April last year on a criminal charge of mislabelling their preparations, and placed under an excessive bond of ten thousand dollars, they finally have been accorded a trial in Detroit under a Judge who frankly admits that he knows little of chemistry. And while awaiting this trial they have been further pilloried by a succession of hearings, at great expense and sacrifice to themselves, while the government has been able to bolster up its case in preparation for this infamous trial.

And during this period of inquisition, we may well ask: What of those in Brazil and Canada who sought to have the doctor carry on his work there? What of suffering humanity in this country, in Great Britain and elsewhere in the world, who can not help but be affected by this brand of infamy which has been affixed to the high esteem in which he has been held? In justice to all, is this not to be considered?

Why should this doctor, whom they seek to destroy, with his harmless, mild, effective treatments, be so persecuted, while these paragons of orthodox medicine continue on their doubtful course unmolested? Let the F. B. I use one small part of the time and energy which they have put forth to discredit Koch, in revealing the truth concerning the unrestricted, horrible burnings of cancer patients with deep X-ray and radium, and the unnecessary, hazardous and futile mutilations of surgery. It will prove an astounding revelation.

It is not only the doctors, but these great industries that supply the paraphernalia of medical care, which have a determining control in shaping the course of organized medicine. The rich opportunity offered through costly hospitalization, the incidental drugs, narcotics, vaccines and serums, aside from professional attendance have a great influence upon establishing the forms of treatment to be accepted, or rejected.

It is not that I wish to imply that all doctors are unscrupulous, but those who are, are aided and abetted by those who are not, through their unquestioning loyalty and submission to the dominant organization of which they are a part. It is the organization of medicine that aids and protects the good as well as the bad, and plays into the hands of the commercial interests which benefit from the exploitation of human misery. In many cases, the doctor is forced into the position of a vulture rather than that of a sympathetic, friendly consultant, as he dare not openly defy the dictates of his organization.

Under the present system there is no restraining of those doctors who would take advantage of illness rather than serve it. The size of the fee, the ability of the patient to pay, the irresistible desire to test one's skill, the lust for blood, too often are the determining factors. The temptation to take advantage of a sick mind and a sick body, urged on by subtle commercial pressure, gives to Organized Medicine a power and decision over life and death, which is a menace not only to our health, but to our very existence.

It may readily be seen that simple, natural, effective methods are destructive of much that organized medicine upholds, and for that reason they take every occasion to suppress and discredit them. That is why they are making such a monstrous effort to destroy Koch. In his trial now in progress in Detroit, one doctor has gone so far as to imply that medicine would have to "fold up" if Dr. Koch is vindicated. And if he is, we may well expect that Organized Medicine, through its iron control over its members, will seek to sterilize his triumph by seeing that he is relegated into blackest desuetude.

The lack of responsibility of the individual doctor in the eyes of the law as well as in that of the profession is utterly unjust and conducive to a lowered efficiency. Only recently, a case was called to my attention of a woman who had to have an operation which would require her to remain in the hospital for a few days. She was there for six months, and her bill was ten thousand dollars. The surgeon's knife slipped. So he told her — but the woman had to pay. This is not unusual. It happens all too frequently, and for which there is no redress under the law.

There is also insufficient protection under the present system against the incompetent, the misfit, the degenerate, the alcoholic and the dope addicts who lurk within the fold and under the protection of organized medicine. Here again there is no redress, no known way of eliminating them from the profession, nor preventing them from continuing to prey upon the unwary.

Vivisection as it is practiced today is outside of all control, and furnishes one of the blackest stains upon our civilization. American idealism and humanity should cry aloud for some sort of restraint upon this orgy of cruelty.

Now that the people's attention is centered upon the war, medicine is taking this opportunity to go on a rampage. Down in Pennsylvania they have pulled out of a hat a pseudo-small-pox epidemic. It may have started from the honest opinion of an inexperienced country doctor, but one million inoculations were too irresistible to set aside after it had once started. And what a grotesque travesty to place this unclean disease on the thresholds of that fine, upstanding Amish people who live in the grand old state of William Penn, where they legalize and enforce the pollution of healthy blood-streams with the syphilitic filth of diseased animals. As a result of all this, there will be cases of small-pox in and around Philadelphia, as well as other diseases of a syphilitic nature.

Medicine is so conservative that they are operating today in the dark ages of necromancy and fetishism. Sister Kenny established her claim to recognition nearly forty years ago. If it had not been that her mild, effective treatment interfered with orthodox practice, the world would have known of her then, over night. And thank God and Sister Kenny, that they will not continue to inject the spinal fluid of diseased monkeys into the bloodstream of our little ones.

In our Central Park here in New York there has been erected one of the lovliest statues to the dog, Balto, that they tell us carried the serum to the diptheria sufferers at a time of epidemic in Nome, Alaska. When we learn that there never was such an epidemic in Nome, and that Balto was never in the place, we realize to what extent they will go to make us serum conscious.

What is needed in this country is freedom of medicine, freedom of doctors to administer mild, natural treatments with as much dignity and protection as those organized groups whose elaborate and costly forms of treatment, under the power of organization, give to them a control and standing out of all proportion and reason. We want freedom of the people to select their own form of treatment, freedom from enforced, legalized, commercialized medication, such as serums and vaccines.

We need a Supreme Court of Appeals for Medicine, presided over by other than those interested parties who regard themselves as being sacrosanct in their omniscience, governed by the humanities rather than influenced and controlled by selfish advantage and commercial gain. And, what is needed more than anything else, is freedom of the Press, free and unshackled from the domination and influence of the vested interests which support their publications.

It is hoped that I have been able to present to Congress good and sufficient grounds for action. Let Congress keep its eyes on the Koch trial, and make ready its ammunition.

Very sincerely,

A. FITZ ROY ANDERSON

February 3rd, 1943

The Vernon News-Herald
Saturday, Sept. 29, 1945 9

Koch Treatment Approved By B.C. Government

The Koch treatment inquiry came through with flying colors at conclusion of the British Columbia department of agriculture's 10-month investigation.

"I am gratified by the findings of the work carried on by the Koch treatment as a remedy for mastitus," Dr. K. C. MacDonald, minister of agriculture for British Columbia, told members of the B.C. veterinary profession who were gathered in the Court House Friday morning.

They met to discuss the final outcome of the investigation sponsored by the B.C. department of agriculture to ascertain benefits of the Koch treatment on cattle suffering from mastitus and sterility.

Present at the meeting were: Dr. J. B. Munro, deputy minister of agriculture for B.C.; Dr. D. H. Arnott, of London, Ont., representing the Koch treatment; Dr. F. W. B. Smith, president B.C. Veterinary association and representative of federal department for health of animals branch; Dr. R. E. Sergent; Dr. W. R. Gunn; Dr. J. E. Bennett; Dr. M. Sparrow; Dr. G. E. R. Barton; Dr. J. G. Jervis; Dr. S. N. Wood, department of animal husbandry, U.B.C.; Arthur Gooder; Lyle Atkinson; Harold Irwin; A. S. Mathews; B. J. O'Rourke.

71 CASES TREATED

During the test, 71 cases of cattle with mastitus were treated. Of this number, 71.9 per cent of the owners expressed satisfaction with the treatment.

Investigation further revealed that of 30 cases treated for sterility, 21 cases responded satisfactorily. The average time sterile before receiving the Koch injection was, the report disclosed, 5.7 months from the previous breeding.

The committee passed a resolution, moved by Dr. F. W. B. Smith and seconded by Dr. that "observations justify the recognition of the working hypothesis of biological oxidation of the Koch treatment meriting its further use in veterinary theraphy".

Dr. Arnott, thanking the committee for their outstanding work, offered co-operation with the department of agriculture to assist in further experimental work.

MACDONALD THANKED

Dr. Arnott said: "It is Dr. Koch's belief that a normal supply of essential carbon compounds often can be renewed by the hypodermic administration of Glyoxylide . . ."

Dr. Munro, thanked Dr. MacDonald for his interest in the investigations and told the meeting that he (Munro) "did take the treatment with favorable results." Reports on the investigation are excellent, he said, explaining that the investigations had been withheld from the press until it was assured that the treatments were satisfactory.

Dr. Gunn, told of the Koch treatment being applied to horses suffering from disease. "The owners are very enthusiastic with the treatment."

Dr. Sergent told the committee that a woman friend had been condemned by a heart specialist two years ago. Through proper application of the Koch treatment she was well today. He recited case histories of dogs that he had treated with amazing results.

The meeting adjourned with recommendation to Dr. MacDonald concerning further work with the Koch treatment.

THE DETROIT NEWS, MONDAY, DECEMBER 19, 1949

House to Sift Health Lobby

Will Quiz Backers and Foes of Truman

WASHINGTON, Dec. 19.—(U.P.)—House investigators announced plans today for an inquiry into activities of all groups lobbying for or against President Truman's compulsory health insurance plan.

Rep. Buchanan (Dem.), Pennsylvania, said his investigating committee also would take a special look at the activities of former congressmen who represent private interests in the capital. Others scheduled to be investigated for lobbying include organized labor groups and real estate interests.

The committee plans to get its inquiry under way early next year.

Buchanan did not say what individuals or groups would be investigated in the inquiry on medical plans. But he said it will include Government agencies as well as private parties trying to influence the battle.

The chief advocate of Mr. Truman's proposal has been Federal Security Administrator Oscar R. Ewing. Most of the opposition has come from the American Medical Association, which recently voted a $25-a-member annual dues to finance its fight.

Buchanan said preliminary investigations have turned up evidence of "irregularities" and apparent violations of the 1946 Lobby Registration Act. The law requires persons who try to influence legislation to register with the clerk of the House.

The ex-congressmen, Buchanan said, will be investigated to determine whether they should continue to enjoy the privilege of circulating on the House floor. He pointed out that a number of former members are registered as lobbyists.

Under present rules, former members are permitted to enter the chamber provided they are not directly interested in pending business, but this proviso has been interpreted liberally.

THE INCREDIBLE FEDERAL TRADE COMMISSION

by **D. H. ARNOTT, M.D.**

"I say that this system is an outrage. To be brutally frank, it smells. And it is time the Government did something sensible about bringing its operations up to the same standard of ethics that it expects of business."

"I know what I am talking about. Since 1945 I have been a member of the Federal Trade Commission."

So wrote Lowell B. Mason in an article published in the May issue of the American Magazine, 1948. Let us examine the Federal Trade Commission at work.

When the Federal Trade Commission attacked Dr. Koch on June 13th, 1942 it issued a "Complaint" which stated that FOR SEVERAL YEARS he has sold his therapeutic compounds "as treatments for various diseases and conditions of the human body" and that his products "do not possess any therapeutic value and their use will not benefit any disease."

The burden of proof, therefore, was upon the prosecution and for this purpose they called witnesses who had not "prescribed respondent's products or observed their effects in concrete cases," but who maintained under oath "that respondent's products, irrespective of the dilution in which they were used, are of no value in the treatment of any disease or disorder whatsoever."

The evidence of many reputable physicians, experienced in the successful use of the Koch therapeutic materials showed that the Koch products had great merit, but this was disregarded by the Commission.

To promote the conviction of Dr. Koch, the Federal Trade Commission obtained in November, 1942, a "temporary injunction" which restrained Dr. Koch from making any general written explanation to his many medical associates and patients, on the grounds that this would be advertising the Koch products. The "temporary injunction" was granted by Judge O'Brien before whom the Pure Food and Drug Administration action was to be heard, and was still in effect when the adverse finding was made by the Federal Trade Commission nine years later.

In its "Findings as to the Facts" issued August 24th, 1951, the commission said in part, (AND NOTE THIS CAREFULLY) that the "preparations have been offered for sale and sold as treatments for various diseases and conditions of the human body AND IN ANIMALS." The original "Complaint" did not mention "animals" for the simple reason that neither in Canada nor in the United States were the Koch therapeutic materials sold for the treatment of animals until after Dr. Koch had been arrested. Therefore, this item of the Finding, under the circumstances, is a complete factual falsification advanced for the purpose of deceiving the public.

In launching the attack on Dr. Koch there was the closest co-operation between the Pure Food and Drug Administration and the Federal Trade Commission, but when in 1946 one thousand pages of evidence very favourable to the use of the Koch treatment for diseases of animals was adduced and placed upon the court record of the Pure Food and Drug Administration's action against Dr. Koch, this co-operation proved to be of interest only where it served the purposes of conviction, and the favourable evidence was refused a hearing by the Federal Trade Commission. The unfavourable finding brought in five years later could not have been advanced without this favourable evidence being refused.

The favourable evidence was presented by the Department of Agriculture of the Province of British Columbia, Canada, together with some who had co-operated with the Department in actual field demonstratons. In 1949 regarding the treatment of mastitis the Department reported in part:

> "The reduction in the number of bacteria between the first test and the second one, made seven days later, was so remarkable that the setting-up of the Committee was justified in that brief interval."

The work of the Department was so well done, the results were so clearly successful, and so ably presented, that the prosecution offered nothing in rebuttal.

Nine years have been spent by the Federal Trade Commission in grim but fruitless efforts to destroy Dr. Koch's therapeutic discoveries. Nothing more need be said to condemn the actions of the Commission for conducting grossly biased hearings, and for bringing in a finding which is flagrantly unjust and also stupidly false.

Great harm has been done to Dr. Koch and myself, but the vast harm that has accrued daily to the Public has been and remains incalculable.

D. H. ARNOTT, M.D.,
226 Queen's Ave.,
London, Ont.

final decisions – "The Government or the editors of the Journal of the American Medical Association on the therapeutic effect of drugs?"

THE FEDERAL TRADE COMMISSION

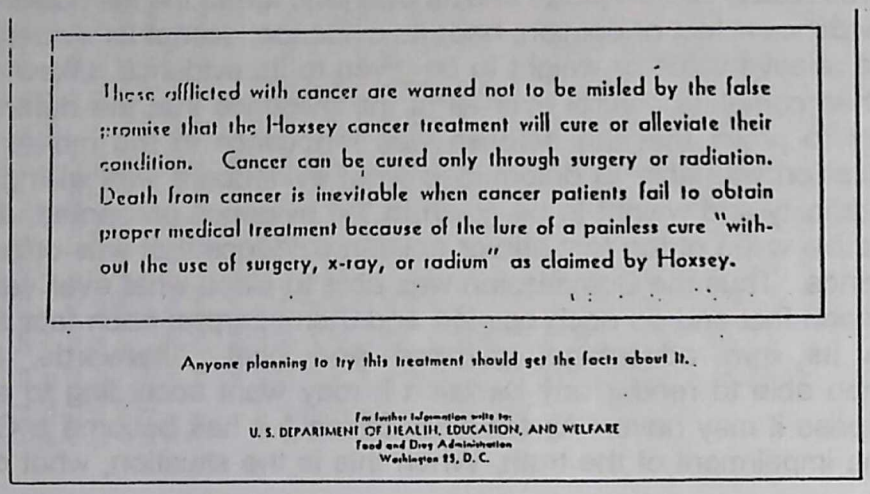
In the 1940s, some of the proceeding of the Federal Trade Commission might easily be compared with the "Spanish Inquisition." where the commission became its own prosecutor, its own judge and its own jury. It had the full power to present its own evidence – fact or opinion; hear its evidence; accept its evidence and determine the relative value or weight to be given to its evidence. Likewise, the Commission had complete control over all of the evidence that the defense wanted to present to prove that the defense was innocence in the matter at issue. The Commission was able to determined what evidence it was willing to hear; and the materiality and weight to be given to the evidence presented, and determine the relative value of the fact and/or opinion evidence that was offered as proof of innocence. Thus the Commission was able to place what ever value it wanted too on each fact and on each opinion and then interpret each fact and each opinion to its own advantage, purpose and goal. Afterwards, the Commission is then able to render any decision it may want according to any preconceived purpose it may have. As the "trier of fact," it has become a God unto himself to the impairment of the truth. When this is the situation, what can one do?

Part of the holdings of the Court of Appeals[68] was: a) that general medical and pharmacological knowledge of doctors qualified them to testify as to lack of therapeutic value of the preparations, despite their lack of clinical experience with the products; b) that objections that commission's witnesses had no clinical experience with the products involved, went to weight but not to competence of the testimony; c) mere fact that words and sentences may be literally and technically true does not prevent their being framed so as to mislead or deceive in such manner as would authorize cease and desist order of Federal Trade Commission directed against use of such words and sentences in interstate advertising; and d) to prevent allegedly false advertising of such preparations, whether the commission's case was rebutted was question of fact primarily for commission to decide.

In the matter of the Federal Trade Commission v. Koch, et al, this is exactly what happened. The "trier of fact" could and did stymie the truth by converting unfavorable facts that were adverse to the government's case into mere opinions and by converting mere favorable opinions for the government's case into supporting facts. The reverse was followed with the defense's case;, i.e., favorable facts for the defense became mere supporting opinions and

[68] From the case headnotes: Koch et al, v. FEDERAL TRADE COMMISSION; No. 11495; 206 Federal 2d. 311, 1953

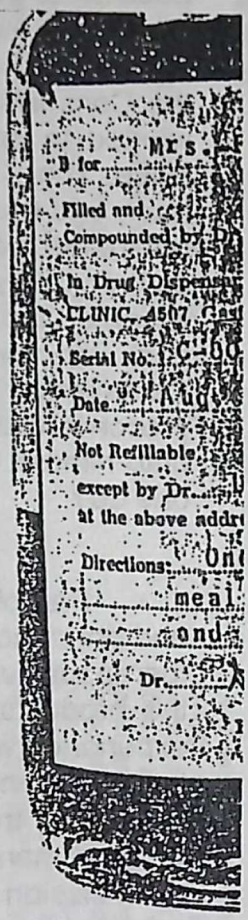
supporting scientific opinions were ignored. Thus the evidentiary weight given to the opinion evidence of the government's experts became equivalent to a material fact and the factual evidence presented by the defendants became mere opinions. In this matter, the "trier of fact" had become a God unto itself to the impairment of scientific and medical truth and the health of the American public..



Those afflicted with cancer are warned not to be misled by the false promise that the Hoxsey cancer treatment will cure or alleviate their condition. Cancer can be cured only through surgery or radiation. Death from cancer is inevitable when cancer patients fail to obtain proper medical treatment because of the lure of a painless cure "without the use of surgery, x-ray, or radium" as claimed by Hoxsey.

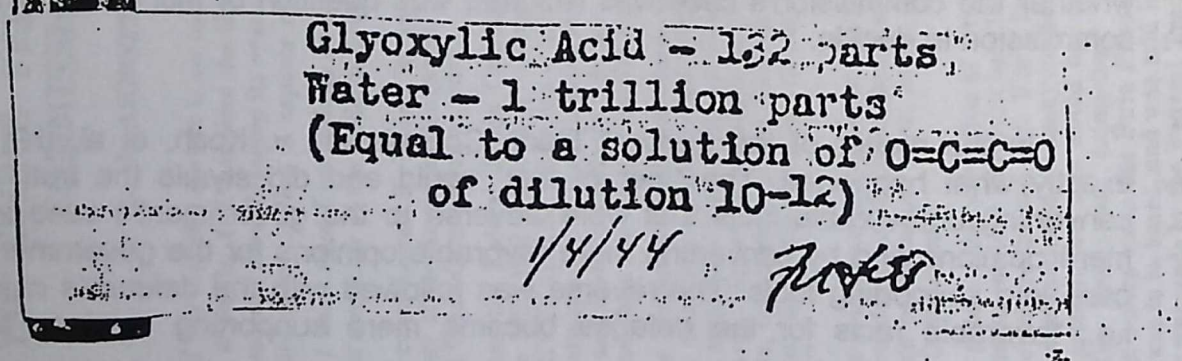
Anyone planning to try this treatment should get the facts about it.

For further information write to:
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Food and Drug Administration
Washington 25, D. C.



Public warning posters placed in 50,000 U.S. post offices and other public buildings saved thousands from being victimized by the Hoxsey treatment while litigation continued in the courts. Subsequently, in 1962, the law was changed to require the effectiveness of drugs to be determined before they are put on the market.

Official samples of the Koch cancer treatment were labeled as containing 1.32 parts of glyoxylic acid to one trillion parts of water, but analysts could find only water.



CHAPTER 14

JURORS COME UNDER ATTACK

Cash Asher,[69] wrote the following in his book, *Science In Exile* (69) about the three (1943) jurors that held out for acquittal of Dr. Koch, Louis Koch and Koch Laboratories, Inc.:

> "From the tone of the post-mortem newspaper stories it was apparent that the 'three stubborn women' defending Dr. Koch, had come under tremendous censure and pressure from those supporting the government. Defense Attorney William Henry Gallagher said that these women had come to him after the dismissal and declared that they had been 'so abused and humiliated by others of the jury that they felt they could never serve on another panel.'
>
> "'All three of these women were told that the Government wants to convict Dr. Koch and we should stand by our Government,' he declared.
>
> "The ability of these women to stand staunchly for their beliefs in the face of abuse and intimidation, commends them to consideration by posterity. They could conceivably have held in their keeping, for a time, a key that unlocked the secret to a new and mysteriously-working principle in biology - - a key whose turning could save the lives of millions of men, women and children.
>
> "And so the somber curtain fell on this drama of science. The government had failed to convict. It had spent more than a million dollars of taxpayers' money in the effort, used its vast police powers, its paid specialists and experts, its justice department and court. The theories its witnesses expounded melted before the intensity of facts." (p. 110-111)

After the second trial was over and the jury had been discharged, Henry Cantin, a Detroit Times reporter, wrote in his July 7, 1946 column:

> "Members of the federal court jury which could not reach agreement in the second trial of Dr. Koch and his brother, Louis, are being interrogated personally by government attorneys and Food and Drug division inspectors, it was learned today.
>
> "The jury was dismissed Tuesday by Judge Robert R. Nevin, after failing to reach a verdict following 36 hours of actual deliberation over a five-day period.
>
> "In that time more than 20 ballots were taken, the first being seven to five for conviction and the last eight to four for conviction. After the

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[69] A former Detroit Free Press reporter who had conducted a personal investigation of Dr. Koch and his cancer treatment at the request of the Chairman of the Cancer Committee of the Wayne County Medical Society in 1929; see A Newspaper Reporter's Investigation, p. 43.

dismissal, jurors engaged in a sprightly name-calling bout and several of them were known to have made statements to government attorneys which resulted in the decision to talk to each juror personally.

"U.S. District Attorney John C. Lehr refused comment, but newspaper-men saw two of the jurors entering offices of the Food and Drug division on the eight floor of the Federal Building.

"John C. Ray, special assistant to the U.S. attorney general, announced today the case is on the court docket and will be retried."

It should be noted that **on August 17, 1948, this F.D.A.'s case against Dr. Koch, Louis Koch and Koch Laboratories, Inc., was dismissed on the motion of the assistant United States Attorney Frank X. Norris.** This action by Mr. Norris brought to an end this phase of the Government's persecution of Dr. Koch at the instigation of the editor of the J.A.M.A.

Only through the humanitarian support of honest and honorable people, such as Dr. Dow, Dr. Hale and the Dow scientists, together with the doctors and scientists from British Columbia and all of the treating physicians and their cured patients, who were willing to stand up for the truth that the defendants, Dr. Koch, Louis Koch and Koch Laboratories, Inc., were able to prevail. Thanks is given to these people and to all of those witness who were able to appear in court and give testimony to the truth in support of Dr. Koch, Louis Koch and the Koch Treatments; Glyoxylide, Malonide and Para-Benzoquinone. Further thanks is given to each and every juror that was able to see the truth and were able to observe the therapeutic effect of the Koch Treatment as was clearly established by the testimony of the many cured patients and their doctors that were presented in open court. It was only through all of these good people that it was possible for the defendants to prevail over this Governmental oppression brought on by the Food & Drug Administration and its collaborator. All of money that was spent in defending these scientific and medical truths could have been and should have been used for further medical research in support of Dr. Koch's research and not in payment for lawyer's fees. As Dr. Dow wrote:

"It almost sounds as if a certain group is attempting to persecute him (Dr. Koch) unjustly." [70]

A FAIR TRIAL?

A fair jury trial; this is what every American defendant wants when the Government charges that defendant with a violation of any law. We, the American public, like to and want to "look up" to our governmental officials, their

[70] Dr. Dow's letter to Mr. Thatcher, June 21, 1946, p. 95.

employees, agents and attorneys as **honest, ethical and decent people who are interested only in the truth and who are free of politics and political pressure**. When the opposite happens, we wonder: "what kind of people are running our governmental agencies?"

The following incident occurred during the first F.D.A. trial, on April 30, 1943, at a time when our country was at war (World War II), in a *life and death struggle with Adolph Hitler*, the world's worst and most evil tyrant of the twentieth century. In order to prejudice the jury against the defendants, at the end of the trial, Edward L. Homes (Assistant chief of the Eastern District of the F.D.A.) was brought to Detroit as a rebuttal witness for the government. His testimony included the alleged fact that Dr. Koch had told him that Adolph Hitler was cured of cancer of the throat with one of Dr. Koch's remedies by a German doctor who learned about the Dr. Koch's research from Dr. Maisin. On the next day, Saturday, May 1, 1943, the Detroit News reported on this prejudicial and improper testimony by the prosecution's witness to the American public:

> **"'He (Dr. Koch) said a doctor who studies under Dr. Maisin cured Hitler of throat cancer."**
>
> **"Holmes said Dr. Koch told him that Dr. Maisin received instructions from him (Koch) in the alleged Koch remedy.**
>
> **"All the testimony dealing with the purported Hitler cure was ordered stricken from the record by Judge Ernest A. O'Brien, before whom the jury trial is being held.**
>
> **"Judge O'Brien commented: 'I hope the Hitler treatment was not effective, if the story is true.'"**

This voluntary statement of Mr. Holmes was **prejudicial error of the worst kind**. Once this statement had been made, it could never be erased from the minds of the jury. Though the trial judge ordered that this testimony be stricken from the court record, his order could never undue the intended damage that had been done by the Government's agent to the defendants. Was the Government trying to put into issue the patriotism of the Koch family by bringing Hitler's name into this lawsuit?[71] How unethical can the prosecuting attorney and the Food & Drug Administration be to permit such prejudicial error?[72] It was reported later that someone had said:

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[71] It should be noted that two of Dr. Koch's sons (Bill & Paul) were serving in the United States Army Air Force at the time of first F.D.A. trial, during WW II. This was not brought out during the trial to show the patriotism of the Koch family! The third son (John) was still recovering from the effects of poliomyelitis. He testified in court in support of, his father, Dr. Koch and the Koch treatment.

[72] It should be further noted that after the 1943 jury trial; no Federal Judge in the in the District Court of The United States for the Eastern District of Michigan, Southern Division, was willing to preside over a second trial of this case and so it became necessary for the Government to import a Federal Judge from the Ohio District Court to preside over the 1946 second trial.

"The Government was out to get Dr. Koch."

And this is just what the editors of the Journal of the American Medical Association wanted the U. S. Government to do —"To get Dr. Koch." The editors of the Journal of the American Medical Association had been trying to do this very same thing for many years, dating back to the journal's first editorial on Dr. Koch on February 12, 1921.

In November of 1948, Dr. Koch, a vindicated scientist, was able to return to Brazil to continue the research work he started seven and one-half years earlier, thus fulfilling his promise of November 1941 to return to Rio de Janeiro. While in Rio, Dr. Koch, a widower, married the widow of a doctor he had worked with in 1941. Brazil became his home where he continued his research until his death in December of 1967. On several occasions, during the balance of his life, Dr. Koch made trips to North America and to Europe.

How Fair is the Press ?

During the 1943 trial the three Detroit daily newspapers (The Detroit Free Press, The Detroit News and The Detroit Times) published daily accounts of the trial proceedings. Over 50 articles were published covering the prosecution's case between January 12, 1943 to February 5, 1943 and over 134 articles were published covering the defense's case between February 6, 1943 to April 21, 1943 in these three local newspapers. While the jury was deliberating, additional articles continued to appear in these papers. This trial had national interest as illustrated by the June 14, 1943 article that appeared on front page of the Drug Trade News' (New York, N.Y.): "FDA Bested In Koch Case; 153 Witnesses Were Called." It reported the failure of the government to prevail in the longest food and drug trial on record. It said that the "FDA officials were visibly disappointed at the outcome of the trial. They regarded the case as of great importance."

However, during the second trial in 1946 that started on February 20th and concluded on July 11, 1946, the government took charge. It was reported that the U. S. Attorney's office had requested the newspapers not to cover this second trial as they had covered the first trial in 1943 because the government wanted to withhold the truth about the successful use of the Koch Treatment from the public. Thus in 1946 about 23 articles were printed in the 3 local newspapers covering the government's prosecution of Dr. Koch and only 7 articles were published covering the defendant's case. Where was the freedom of the press during the Food & Drug Administration's most important trial in its history that lasted over five months?

THE DETROIT FREE PRESS AND ITS EDITORALS

On May 31, 1943, the Detroit Free Press published an editorial in which it said:

> ***"Try Koch Again*** There should be no hesitancy about expense on the part of the Department of Justice in demanding a retrial of the case of Dr. William F. Koch and his brother, accused of violating the Food and Drug Law in their claims to be in possession of a cure for cancer.
>
> **"The fact that they were indicted and that nine of 12 jurors believed them guilty, after 20 weeks of testimony, lends justification to the demand on the part of the medical profession that they be brought to justice again. And this time it is to be hoped, with a more vigorous prosecution...."**

This was the same Detroit Free Press newspaper whose editor, in 1929, did not have the "strength of character" to publish Cash Asher's investigation of Dr. Koch and the Koch Treatment because his investigation told the truth and was favorable towards Dr. Koch and his cancer treatment.[73] That 1929 Detroit Free Press editor told Mr. Asher:

> **"We have to accept the truth of authority, and sometimes overlook the authority of truth."**

However, on July 11, 1943, The Detroit News published the following letter in its "The Public Letter Box" column:

"Human Nature Unchanged"

> "It was with a touch on nostalgia that I read the Commentator's article commemorating the 100th anniversary of the death of Christian S. F. Hahnemann, the medical doctor who founded Homeopathy.
>
> "In the days of my youth I well recall my father, on occasion, taking down an ornate cabinet and extracting therefrom the slender phial containing the proper triturate for our various and sundry childhood ills.
>
> One essential constitutional pathology erudite Dr. Hahnemann painstakingly evolved over 150 years ago, was that merely an extremely minute dose of a drug was sufficient to set up in a patient's body a reaction against the diseased condition to effect a cure. Hahnemann was the protagonist of high dilutions, which he achieved by successive and progressive succussions.
>
> "Of the efficacy of his method of treatment of disease we have very recent, and local, testimony, in the five months long trial of Dr. William F. Koch in Federal Court.
>
> "Mr. Kelsey's informative article stresses that it was the hostility of the established interest, and especially the resentment of the big drug houses of Hahnemann's day, that made trouble for him as soon as they realized the success of Homeopathy would seriously curtail their sales of drugs.

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[73] See A Newspaper Reporter's Investigation, p. 43.

"Human nature hasn't changed much. Examine any issue of the Journal of the American Medical Association. Note that page after page is given over to the expensive advertising of the products put out by the big pharmaceutical houses. That's the big reason why pro-public physicians like Dr. Koch are anathema to some of the other paths. They are pro-patient. They aim to cure with one dose.

"This, the people are beginning to understand. Homeopathy is coming back – bigger and better than ever, because it is the People's Medicine." "B. C. Hughes, 2055 West Grand Boulevard."

In 1946, after the second trial came to an end with no jury verdict, The Detroit Free Press once again expressed its editorial opinion in support of the government. On July 25, 1946 the following editorial appeared in this paper.

"The Koch Case The Koch brothers, Dr. William F. and Louis, claim they have a cure for cancer. If so, the fact is epochal and they should give their findings to mankind for use in the war against this ruthless disease.

"On the other hand, the Federal Government charges that the Kochs have no such cure. Twice now have trials ended inconclusively in jury deadlock. The first was in 1943. This time illness of a juror was the decisive factor.

"In view of the serious nature of this case, the next step should be plain. There should be a new trial without delay. Proceedings should be pushed until a clear verdict of innocence or guilt is reached."

Mr. Irving Long,[74] having read the above editorial in his morning Detroit Free Press, felt that it was time for him, as one who knew the true facts about Dr. Koch and his cancer research, to respond to this misguided editorial. Mr. Long wrote to the Detroit Free Press that day as follows:

Voorhies, Long, Ryan and McNair
Penobscot Building
Detroit, Michigan 26

July 25, 1946

Detroit Free Press
Detroit, Michigan

Gentlemen:

"Your editorial in today's issue concerning the Koch case is based upon an erroneous assumption of facts. You say that if Dr. Koch has a cure for cancer he ought to disclose it, and you therefore convey the

[74] It should be noted that Mr. Long, of the Law Office of Voorhies, Long, Ryan and McNair, represented Dr. Koch during the first F.D.A. trial in 1943. He was not the attorney of record for the defendants during the second, 1946, trial. However, he was a man of honor and well versed in the true facts of this case. He felt it was his duty to speak out for the truth. It is a shame that the Detroit Free Press elected not to publish his letter. As the 1929 editor of the Free Press said: **"We have to accept the truth of authority, and sometimes overlook the authority of Truth."**

impression that he is being prosecuted for refusal to disclose the facts concerning his remedy. The charge against him is that labels on some of his products are false, in that they imply the drugs which he sells to physicians only, and not to the general public for self medication, have therapeutic value in the treatment of cancer and some other forms of disease. As the judges in two trials properly instructed two juries, he is not guilty of the charge if the drugs have any value as a mitigating agent.

"In his long career Dr. Koch has disclosed many times the chemical composition of his drugs, his theory as to how they work in the body, and how they are prepared. He has been a witness in all trials and has been cross examined by government attorneys, and answered every question asked concerning the same. Prior to 1942 he published elaborate books, pamphlets and lectures on the subject. Since that year he has been restrained by court injunction, obtained by the government itself, from publishing any further literature. This ought to set you right on the question of whether he is remiss in any way in not giving information to his brother physicians.

"In the trial the issue comes down to the question of clinical proof. Have the drugs in cases where they are used shown the capacity claimed for them? No one expects any medication to be 100% effective. No remedy is known which always produces results; hence there must always be failures.

"The record in these trials show case after case of patients diagnosed as having cancer, who after treatment with one of Koch's drugs recovered their health, with all signs of cancer disappeared. When I say diagnosed, I mean situations where the patient went through the routine hospital procedure of having a bit of the lesion suspected as malignant excised, and submitted to the inspection of a trained pathologist. Upon the basis of the appearance of the cells in a tissue slice properly stained and mounted upon a microscopic slide, the pathologist arrives at the conclusion after a view of same under the microscope that the patient has or has not a malignant growth. A brief statement of one or two of these cases, as disclosed by hospital records and other evidence before the court, will illustrate what I mean.

"A gentleman who lives in Jackson in 1934 noticed a lump over his right shoulder blade, and the use of his right arm had become exceedingly painful. He went to the University of Michigan Hospital for diagnosis. X-rays of the bones of the shoulder girdle and arm were taken and examined. They showed a pathologic condition which the roentgenologists were unable to identify. Consequently, the patient was required to undergo a biopsy operation, whereby portions of the bones and surrounding tissue were removed and submitted to microscopic examination. The finding was a malignant condition known as hemangio sarcoma. Advice was given that he should submit to an operation whereby shoulder blade, right clavicle and right arm should be removed. All this appears in the hospital record. Being unwilling to be crippled in this manner, the patient took Koch's treatment. After some months he recovered and has remained symptom free for eleven years, at least. Subsequently x-rays are admitted by government experts to show that the pathology has been corrected.

"The government claims in this case that the man never had cancer, as they interpret the x-rays taken at the time of his visit to the University of Michigan Hospital as showing a non malignant condition. In

this instance they claim that pathologist's report of malignancy should be disregarded.

"Here was a case history where the diagnosticians at the excellent institution at Ann Arbor had no reason to anticipate that the man would go to Dr. Koch. They were sincerely trying to find out the nature of his condition, were unable to determine the nature of the disease without a tissue examination, and upon such tissue examination arrived at a diagnosis of cancer, which in their judgment warranted the advice that he should submit to a crippling operation. Had this operation been performed, the absence of recurrence of the cancer would be attributed to a successful surgical operation.

"Another man was in the Ford Hospital, Detroit, on repeated occasions for an abdominal condition. The hospital record shows that at first this case was diagnosed as an abscess, but finally portions of the lesion removed showed malignancy and his condition on the basis of tissue examination was pronounced as cancer. With an open sloughing wound in the abdominal wall, from which the intestinal contents were discharging, and the lesion so extensive that no operative relief could be suggested, he was left out of the hospital apparently in dying condition. He received the Koch treatment, recovered his health and strength, and there has been no recurrence for four years. Government cancer experts admit that he had cancer, but contend that the four years that have elapsed is too short a time to say that he has been cured. Whether he has or has not, the difference between a bedridden condition at death's door, with an open wound in his abdomen, and his present condition where he is performing hard work on a farm, is significant of benefit.

"There are many more cases and it would take too long to review them in such a letter as this.

"I suppose that jurors who in both trials held out for acquittal were impressed by this clinical proof and were not willing to go along with the government's contention that the Koch treatment is wholly worthless. It seems to me that no matter how many times the case is tried and the evidence fully presented, as it has been in two trials that have occurred, there will always be some jurors who are more willing to rely on the established facts in the experience gained through the use of this treatment than the opinions of experts whose testimony is to the effect that this experience is inconclusive.

"When one knows the facts presented by the evidence and documents, the futility of these trials becomes apparent. The labels which the government charges were false in their representation as to therapeutic quality were discontinued as soon as Dr. Koch was indicted. Had the Food and Drug Department objected to their use, he would have discontinued them at its request, as it is obvious that physicians do not conclude to use a remedy because of what appears on the label. The record shows that numerous physicians throughout the world still continue their use, notwithstanding the claims of government experts. The only claim of harm that may result is based on the theory that patients who could be better and more effectively treated by some other method get the Koch treatment rather than the standard treatment, but this is not borne out by the record. The patients coming to Dr. Koch and his followers do so only because it is the last faint hope. They have already had what standard medicine can offer, or have reached the conclusion that they will not submit to a maiming operation such as was

suggested in the first case to which I have referred. One can clearly sympathize with that man's decision that he would take his chance with the Koch remedy, rather than to live a hopeless cripple.

"It may take many years before a remedy or form of treatment is accepted. Only now, after thirty years, have the majority of doctors come to the conclusion that the Kenny treatment for paralysis after poliomyelitis is effective. There are still many who deny it. A jury composed of laymen cannot be expected to solve such questions. It takes time and experience to find these things out. There always have been differences of opinion among medical men as to methods to be pursued in combating disease, and the law recognizes the impossibility of reconciling them, by licensing practitioners of the old school, homeopaths, osteopaths, naturopaths, chiropractors and others who pursue divergent methods, which often are in sharp conflict. Suppose it were left to a jury as to whether the principles of homeopathy were sound? Does anyone suppose that a verdict either way would either root out that form of treatment, or cause it to be universally accepted?"

Very truly yours,

Irving Long

IL:CLD

QUESTIONS TO BE ANSWERED

Why did the Detroit Free Press fail to print Mr. Long's letter of July 25, 1946 to the editor. Was the Free Press afraid of the truth? What happened to the "Freedom of the Press?" Is the press afraid to speak out for truth? Are there no real investigative reporters anymore? Where do we find the "Authority of Truth?"



FEB 6 1913

3 Cancer Cures Put Into Record At Koch Trial

Hospital Testifies Glass Cure Helpful as Defense Witness

FEB 10 1913

Doctor Testifies Koch Formulas Aided 16 Cases

Medicines Cured His Own Affliction, He Informs Court

FEB 12 1913

Cancer Cured By Koch Drug, Farmer, 80, Says

FEB 18 1913

Koch's Medicine Credited as Cure For Many Ills

FEB 21 1913

Koch Medicines Credited With Rebuilding Lung

MAR 3 1913

Cancer Doctor Says Koch 'Cure' Replaced X-Ray

FEB 26 1913

Cancer Linked To Allergy by Koch Witness

MAR 13 1913

Malaria Added To Ills Claimed Cured by Koch

'Skeleton Boy' Reported Saved By Koch Remedy

Koch Witness Gives His 'Cure' For Tuberculosis

Doctor Tells of TB Cure

Says Koch Remedy Had 'Startling' Effect

Koch Drug Praised By Nun

FEB 13 1913

Cancer Victims Testify to Cures By Koch Drugs

MAR 5 1913

Koch Cure Claimed In Heart Case

Koch's Remedy Cured Cancer, Nurse Says

Koch Cures Told

Heart Attack Victim, 49 Years Old, How a Commando, Winnipeg Doctor Testifies in Court

FEB 18 1913

Koch 'Cures' Seen as Boon to Medicine

Chemicals Drained to Alter Course of Practice, Builds Physician Asserts

FEB 20 1913

Koch Drug Credited in Heart 'Cure'

Winnipeg Doctor Tells How Canadian Letter Was Accepted by the Commandos

FEB 13 1913

TESTIFIES FOR DOCTOR

Koch Remedies Saved Her Life, Woman Says

FEB 26 1913

Koch Drug Cured Baby, Says Doctor

Glyceryllde Erased All Signs of Cancer, Young California Osteopath Testifies

FEB 10 1913

Koch Remedy Saved Lives, Doctor Testifies

MAR 5 1913

3 More Tell of Cures by Koch Drug

Cancer, Colds, Sinus Thrust All Vanish, Jury Is Assured, 'Story' Is Admitted

MAR 13 1913

More Cures Credited to Koch Drugs

Doctor Testifies of Malaria Treatment; a Patient's Deposition Tells of Failing Back

Says Koch Drug Saved Dying Boy

Florida Physician Ulges Glyceryllde Full Credit for Child's Recovery

MAR 19 1913

Koch Cure Called Good on Gangrene

California Doctor Says He Saved Toe of Patient by Use of the Medicine

FEB 27 1913

Girl's Eye Saved By Koch Clinic, Mother Says

MAR 6 1913

Texan Says Koch Drug Cured Half His Patients

Koch Drugs Saved Her, Woman Says

Housewife Testifies in Behalf of Lawyer; Attorneys Bicker over the Evidence

FEB 12 1913

Koch's Medicine Cured Asthma, Doctor Testifies

MAR 12 1913

More Cures Claimed for Koch Drugs

Cases of Infantile and Trench Mouth Cited by Witnesses at Cancer Session

MAR 3 1913

Juror Faints at Testimony in Koch Trial

Withered Hands of X-Ray Specialist Causes Gallopers Hearing Recessed

(Not printed at Government expense)

United States of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 80th CONGRESS, SECOND SESSION

The Koch Treatment

EXTENSION OF REMARKS
OF
HON. WILLIAM LANGER
OF NORTH DAKOTA
IN THE SENATE OF THE UNITED STATES
Monday, June 7, 1948

Mr. LANGER. Mr. President, I hold in my hand an article which appears in the current issue of a Lutheran magazine called the Eleventh Hour, published by the Lutheran Research Society of Detroit, Mich. This article bears the title "The Koch Treatment."

It describes the science developed by Dr. William Frederick Koch, of Detroit, Mich., for the treatment of prevailing diseases to which our twentieth-century civilization is heir.

I have personally watched the progress of this system of treatment over a period of years. I feel that it is deserving of the attention of everyone who is interested in the health of the American people.

I therefore ask unanimous consent to have this illuminating document printed in the RECORD at this point as a part of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE KOCH TREATMENT

Fortunately for Canadian farmers in the Province of British Columbia, the Minister of the Department of Agriculture possessed an open mind.

This fact is saving cattle raisers into the millions of dollars annually. It is assuring them of better cows, steers, and beef than previously known.

Such ailments as Bang's disease, Johne's disease, and other fatal diseases that customarily make devastating demands upon dairy herds, are no longer fatal in British Columbia. Thanks to the integrity and foresight of Canadian physicians, veterinarians, and Government experts who recently completed a series of successful experiments with the Koch system for treating virulent diseases.

More about these investigations a little later.

But, be it known as a further warning against trying to suppress truth, that farmers in various parts of the United States are rising up in indignation, demanding the right to enjoy the same advantages as their Canadian brethren. Cattle raisers in South American countries, notably Brazil, have for years demonstrated the validity of the Koch treatment.

As an index to the stir now being created by American men of the soil, your editor has before him a document which may well become one of historical importance. It is a petition, drawn up by a group of Michigan farmers and submitted for signature to members of State legislature for their respective districts. It is dated April 1948, and says:

"We the undersigned members of the Michigan State legislature respectfully petition the Congress of the United States, through an appropriate committee to investigate the injunction imposed by a Federal court on William Frederick Koch, Ph. D., M. D., a pioneer in the field of research and treatment of cancer, inasmuch as recently discovered methods of treatment confirm the research of Dr. Koch, with the end in view of requesting the Attorney General of the United States to have said injunction dismissed, so that Dr. Koch can continue further research and practice in his field without restriction."

The document bears the signature of 25 legislators.

More about Dr. Koch's persecution a little later. • • •

Suffice to say that Michigan farmers are not letting their herds die while waiting for bureaucrats to lift an injunction that should never have been imposed. They are using Koch therapy anyway, thereby saving themselves and the public substantial sums of money in terms of cattle, beef, and dairy products.

Injustice temporarily denies the learned physician the right of recommending his treatment. But men living close to nature, who know values when they see them, are using the discovery just the same.

This reminds us of the man of old who insisted the world was round and that it moved on its axis. In stocks, suffering excruciating pain, he cried out that his tormentors were right—the earth was flat and stationary. But when given his freedom, he confided to a friend that the earth had been moving all the time.

Denial of the earth's rotundity did not cause the solar system's wheels to stop.

Dr. Albert L. Wahl, a New York physician of enviable attainments, says in his book, A Least Common Denominator in Antibiotics: "In the philosophy of medicine, the last word has not been said. Nor, of course, is it presumed that the present writing encompasses the final dictum. But in the words of the Old Testament, 'God has worked a new thing,' and this new thing (the Koch treatment) is substantiated by extensive clinical observation. And the facts press hard upon our present concepts, not only of clinical pathology, but of the chemistry of immunity, and clamour for a revision of our philosophy of medicine."

Dr. William J. Hale of the Dow Chemical Co. says: "Dr. William Frederick Koch is modern Pasteur."

Prof. Joseph Malvin of Louvain University, Belgium, stated to the Canadian Cancer Commission in 1940: "The Koch formula should not be called merely a cancer cure. It is a very important step in medicine and is apt to change the whole picture of medicine and pathology. Dr. Koch is doing wonderful things."

It is an interesting story how Koch therapy began to be applied to animals:

Dr. D. H. Arnott, of London, Ontario, first applied the system in the cure of human diseases in 1920. Other physicians and scientists became deeply interested in the cures effected. While convinced that Dr. Koch had discovered new and useful therapeutic chemicals, the kind of data customarily accumulated by animal experiments was lacking. This led to the amazing results that farmers are now enjoying.

The Honorable K. C. MacDonald, Minister of Agriculture of British Columbia, called a group of experts together at Vancouver on October 4, 1944. It was agreed that the Koch method of treating diseases which were then ravaging fine dairy herds, should be carefully studied.

Two divergent views were expressed at this meeting: (1) Educational, scientific, and administrative authorities present, took the position that reports of cures were fantastic and too good to be true, (2) Practical men, farmers who had seen the demonstrations with their own eyes, testified that results were being realized exactly as claimed.

On page 16 of his 1944 report, the Minister stated: "There were many dairymen present who made astounding claims for the Koch treatment. In practically all cases the dairymen claimed that their cows responded almost immediately. These cattle owners were emphatic in their request that no action be taken which would prevent their obtaining Koch treatments when required."

One leading breeder told how the Koch treatment had saved an especially good cow given up to die. He explained that it developed mastitus during lactation. A veterinary surgeon advised him to have the animal removed from the herd and slaughtered. There was danger of the infection spreading.

Instead, the Koch treatment was applied. The action consisted of one dose of the therapeutic reagent being administered by hypodermic syringe under the skin of the neck. Recovery was instantaneous and within a week the cow's milk was being sold to the creamery.

Other breeders related similar experiences. Thereupon it was unanimously agreed that the Department of Agriculture should investigate the merits of the system. The official declaration appears on page 16 of the agricultural department's 1944 report: "The Minister stated that it was his desire to form an opinion based upon accurate investigations and he named a committee to undertake this investigation."

Mr. MacDonald's words of instruction were: "I am Minister, and gentleman, I am determined to get at the truth."

Two veterinarians were appointed by members of the committee to work together. Animals were to be examined and their diseases classified. It was agreed that no clinical problem would be rejected because of the severity of the disease. The joint opinion of the owner and the two veterinarians was to be accepted as final. Field work was begun in November 1944 and completed in September 1945. A Government laboratory and a private laboratory duplicated each other's work and checked up on the bacteriology and other analyses required for the test.

The results were nothing short of astounding to members of the committee. Everything that the Koch Laboratories, located at 6181 East Jefferson Avenue, in Detroit, anticipated, came to pass. It was fitting that the final report published by the Government of British Columbia should have contained a statement by Dr. Arnott. He summed up the Koch theory of treatment as follows:

"Life is promoted, sustained, and reproduced by the use of food. For good health the supply must be adequate in amount and in variety. For the best normal results it is necessary that the food be well digested, and also that the potential energy contained therein be transferred into living energy throughout the body at a vigorous rate, burning the food properly in each individual cell where it unites with oxygen for this purpose.

"'This living chemical reaction is spoken of by medical science as 'internal respiration,' and it must take place continuously because nature has not provided any reservoir wherein oxygen may be stored, to be drawn upon at will or in time of need. It is upon the degree approaching perfection with which food is thus turned into living energy consistently that conditions requisite for good health are best maintained, that diseases are best resisted, that life is best reproduced.

"It is Dr. Koch's belief that a normal supply of these essential carbon compounds often can be renewed by the hypodermic administration of the reagents which he discovered."

The committee adopted a closing resolution which contained the following commendatory clause:

"That the observations justify a recognition of the working hypothesis of biological oxidation of the Koch treatment, meriting its further use in veterinary therapy."

And so, our Canadian friends are profiting from the wonderful achievements of the Koch science.

Dr. Koch began the treatment of cancer in 1918 and other diseases later.

He soon discovered interests existing in the United States that did not welcome recoveries from these deadly enemies of society to reach the public. Since that time he has had to constantly beat down the opposition in order to continue his work for the relief of suffering humanity.

The fundamentals of the Koch science may be succinctly stated as follows:

1. That the chemistry of natural immunity in the body is able to destroy the toxicity of germs.

2. When the body is invaded by toxic bacteria so full of poison that they spill over into the system, the oxidation mechanism must burn off these poisons or the person becomes ill.

3. The less able the system is to burn, or oxidize, the poisons, the weaker the person becomes. When the oxidation mechanism fails to burn off any poison, the victim dies.

4. The Koch Laboratories have developed synthetic antitoxins which act as a catalyst in helping the body build up its oxidation mechanism equal to the task of destroying these toxins. When natural immunity is restored the person recovers.

5. Cancer behavior is a protective response to a toxic product generated within the body. Dr. Koch summarized the matter many years ago in a scientific paper from which the following sentences are reproduced:

"Clinical observation discloses the persistence of toxemia over a period even as long as 20 years previous to the advent of the growth. After the growth has come these toxic manifestations disappear, or nearly so. After surgical removal of the growth they return and with recurrence of the growth again disappear. We designate these symptoms as the progrowth symptoms, for they differ from these consequent to the activity of the growth itself.

"The strongest and the sufficient proof that cancer is a response of protection against a definite toxin, however, rests with the fact that removal of the toxin and destruction of the toxin source is followed by complete involution of all cancer tissue, complete healing of the regions involved, return to health with absence of growth and progrowth symptoms, and the absence of recurrence."

6. Diet occupies a prominent place in the practical application of the system.

Testimonials like the following by Dr. Wahl could be multiplied to fill several large volumes:

"Over a year ago, my sister was dying of lymphosarcoma, a disease which the profession regards as invariably fatal. The diagnosis was made by Dr. H. H. Fermar, of Mercy Hospital, Pittsburgh, Pa., on the basis of biopsy study No. 1171, May 1, 1940. The medical staff of Mercy Hospital had previously made a diagnosis of lymphosarcoma or Hodgkin's disease.

"The case was far advanced at the time, my sister having been practically bedridden for 6 months because of weakness and recurrent infections. The masses of lymphoid tissue did not have to be palpated; they stood out on the sides of her neck and in her axillae and groins like bunches of grapes mixed with walnuts.

"When the diagnosis of lymphosarcoma had been made, and I had received written commiseration from a top-ranking staff member of Mercy Hospital, it never occurred to me to do other than offer my sister the straw hope of deep X-ray therapy. Everyone who examined her thought she would be dead within a few weeks.

"I refused to listen to my father's recommendations that my sister be treated with a substance built up from the conjugated systems of carbonyl and ethylene linkages. Because of American Medical Association propaganda, I believed that the results previously reported with this therapy 'approached the acme of quackery.'

"However, my father did have my sister treated, since he personally knew of cases of cancer which were cured and remained cured after its use. This type of cancer is fatal in 3 to 6 months, as a rule.

"My sister was in the last stages and was said to have only a few weeks to live, according to the best knowledge on the subject. She recovered after one dose in characteristic fashion.

"Then and there, I decided to undertake an independent investigation of the treatment. I have been irrevocably convinced of the great value of this treatment.

"The American Medical Association is not yet convinced after 25 years. But that is an old story."

William Frederick Koch was graduated bachelor of arts at the University of Michigan in 1909 and later received the degrees of master of arts (1910), and doctor of philosophy (1917). He received his medical degree at the Detroit College of Medicine.

During 1910–13 he was instructor in histology and embryology at the University of Michigan, and for 5 years, 1914–19, professor of physiology in the Detroit Medical College.

Comparisons are odious, but Dr. Koch has been described by authorities as "the world's greatest living chemist"; "the discoverer of a new science which charts the future course of the medical profession"; "one who cannot be bought, coerced, or intimidated"; "a Christian gentleman of courage and distinctive attainments"; and "a man of amazing capacities."

No one who knows him well and understands the humanitarian spirit that animates his every deed will deny that the foregoing descriptions apply.

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CHAPTER 15

IMPORTANCE OF INDEPENDENT BASIC RESEARCH

The independent basic research of Dr. Szent-Gyorgyi and Dr. Koch, during the Twentieth Century, has followed the same parallel path which has led them, individually, to the identification of the same "activated di-carbonyl groups" that are an essential ingredient of the body's natural immune system. In the 1960's Dr. Szent-Gyorgyi, discovered Retine, a di-carbonyl, as the substance that inhibited cancer cell division and which he later identified as a glyoxal derivative such as methyl glyoxal. Three times he asked for a research grant to continue this important research from the National Institute of Health and three times he was turned down. A mere $200,000.00 grant to him at that time would have solved the cancer problem once and for all times had he been given the financial support to continue this important basic research. Though he was so close to the answer to the cancer problem, it appears that the Government did not really care. The Government would rather spend billions of dollars elsewhere. Or was the Government afraid that when Dr. Szent-Gyorgyi proved the correctness of his cancer research, that at the same time, he would also be proving the correctness of Dr. Koch's cancer research and this the Government could not allow? This basic scientific truth would have revealed to the world the F.D.A.'s fraud in the 1940's, which fraud has continued to now. This individual basic research of Dr. Szent-Gyorgyi and Dr. Koch is mutually complementary and should be recognized and used for the benefit it can give to humanity.

Dr. Linus Pauling has also recognized the importance of this di-carbonyl structure in dehydroascorbic acid and its relationship to ascorbic acid and the readily reversible reaction that takes place between dehydroascorbic acid (a strong oxidizing agent) and ascorbic acid (a strong reducing agent). He identified Vitamin C as a general detoxifying agent. He further recognized the importance of the detoxification of all carcinogenic and other toxic substances by the use of oxidizing agents that converted these substances into nontoxic derivatives that can be eliminated from the body in the urine all of which is in accordance with Dr. Koch's thesis.

Over fifty years ago, Dr. Otto Warburg, Dr. Szent-Gyorgyi and Dr. Koch recognized, independently, that cancer cells are normal cells that have reverted to a primitive anaerobic (alpha) state thus losing their normal aerobic biological chemistry and that as cancer cells, these cells continue to reproduce out of control indiscriminately. Likewise, they recognized the importance of correcting the cancer cell's chemistry in order find a real cure for this dreaded disease, Though it is now reported that there are over 200 forms of cancer; each cancer still has the same basic common denominator, uncontrolled cell division.

Dr. Warburg came to the correct conclusion "that anaerobiosis is the prime cause of cancer and that this (anaerobiosis) meets the demands of Pasteur." He

went on to write and say:[75]

> "...**The cure of human cancer will be the result of biochemistry of cancer and of biochemistry of man....** There exists no alternative today to the prevention of cancer as proposed at Lindau. It is the way that attacks the prime cause of cancer most directly and that is experimentally most developed. Indeed millions of experiments in man, through the effectiveness of some vitamins, have shown, **that cell respiration is impaired if the active groups of respiratory enzymes are removed from the food; and that cell respiration is repaired at once, if these groups are added again to the food. No way can be imagined that is scientifically better founded to prevent and cure a disease, the prime cause of which is an impaired respiration.** Neither genetic codes of anaerobiosis nor general cancer viruses are alternatives today, because no such codes and no such viruses in man have been discovered so far; **but anaerobiosis had been discovered."**

And Drs. Koch and Szent-Gyorgyi, through their independent basic research, found the missing answer to the cancer cell division mystery; i.e., the physiological activity of the dicarbonyl (O = C = C = O). That it is through the use of the dicarbonyl, and its related chemical structures, in proper enzymatic dilutions[76] that the cancer cell problem is being solved and a successful and proper nontoxic method of treatment for cancer and its allied diseases is possible. By following their lead, real progress will be made field of modern medicine.

The Author's Summary

It was through the original **"basic"** research of Dr. Koch, starting at the University of Michigan about 1910, that he was able to develop his theories on pathogenesis and the chemistry of natural immunity. That by removing the toxic pathogenic agents and their effect on the body chemistry and by restoring the cells metabolism to a normal aerobic state, he found it is possible for the pathogenesis to be reversed, the toxins metabolized and removed from the body and a victory over disease could be achieved.

It is too late to help the millions of people who have suffered and died needlessly because of the negative actions and the closed minded and antiquated attitudes of the medical hierarchy of the past and who have controlled the medical profession dating back to before 1919. The cooperation of certain Federal Governmental and State agencies with these people have compounded this tragedy. Though there is no known single pharmaceutical drug that will cure everyone of every disease, there are different pharmaceutical drugs that have a wide range of activity when working with and complementing the body's natural immune system.

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[75] See page 102.
[76] See page 85.

We know that the body's natural immune system is essential if a sick person is to recover from his (or her) illness and for maintaining a person's perfect health. Dr. Koch believed that his research has shown that this is where the dicarbonyl functions at its best. With a better understanding of the natural immune system of the body and the part that the dicarbonyl plays in overcoming illness and in restoring health, doctors will be able to best serve their patients in time of need.

All that one can aspire to do is to do the most good possible for the most people in the war against disease by working with the body's natural immune system. It is through a better understanding of the physiology of the body and by using all of the accumulated knowledge of the past pertaining to the physiological chemistry of the body, together with an "open minded" basic research program, that real progress can be made in medical science today. This is what Dr. Koch did during his lifetime. His legacy must be carried on, if human suffering from disease is to be brought to a minimum in our time.

At present it seems that the only "approved *orthodox* treatments" for cancer patients do more damage to the natural immune system of the body than the cancer, i.e., **the experts try to kill the "cancer" before they kill the "patient" with their approved toxic medical therapy**. Does this sound logical? It is for this reason that I have written this paper. It is through the uncontrolled and independent thinking of all researchers, that **"basic scientific truths"** will be revealed and accepted. Thus, mankind will benefit by the full acceptance and application of this knowledge in the treating of the sick.

Dr. Koch devoted his lifetime to the development of an effective treatment for cancer, which he has dedicated to the medical profession. His basic and applied research, in the cause of and treatment for cancer and its allied diseases, is of record for anyone to read and study and it is of fundamental importance to us all. This research is supported by the basic research of Drs. Albert Szent-Gyorgyi, Otto Warburg, Joseph Maisin and others. Today his research should be adopted by all and used for the benefit of mankind for the good it can do.

As a humanitarian program, the medical profession and our Governmental Agencies owe a duty to the American people to set aside their animosity and to accept the correctness of Dr. Koch's basic and applied scientific research and his discoveries. Our Government and its bureaucrats should not be permitted to continue to hide this truth from the public, as it has done for so many years in this and other matters. For example:

1) the government's inhumane experiments conducted on poor patients with syphilis at the Tuskagee Institute that was started in the 1930's. These experiments were continued on for decades without revealing the truth about them. This sounds like Hitler all over again(!);

2) the failure to properly forewarn and protect thousand of workers in our atomic weapons plants from the dangers and resulting diseases caused by radiation poison since 1943;

3) the Food & Drug Administration's premature release of many toxic pharmaceutical drugs that have been placed on the market without adequate scientific proof of their toxicity and their therapeutic effect to the detriment of the public;

4) the suppression of the Senate Interstate and Foreign Commerce Committee's 1953 secret investigation by and report of Senate Agent Benedict Fitzgerald in the matter of the American Medical Association on new drugs in the treatment of cancer and other illnesses;

5) the on going conflict of interest that has occurred between employees of the Food & Drug Administration and organized medical associations and the medical profession;

6) the conflict of interest that has occurred between employees of the Food & Drug Administration and the pharmaceutical industry; etc.

7) the illegal use of navy personal as test subjects in a simulated spray test of navel ships with toxic "B G bacteria" and with "Zinc Cadmium Sulfate" in operations "Autumn Gold" and "Copper Head" in 1963 without the consent of the individual sailors;

GOVERNMENTAL DUTY TO THE AMERICAN PUBLIC

Our Government owes a duty to the American public to make the Koch therapeutic medications available to everyone, who should want them, **free of charge** as a form of medical treatment to help these sick persons rebuild their natural immune system and fight off all disease conditions that the Koch medications have been found to be effective in treating.

It is the moral duty of the personnel of our federal and state governments together with today's medical profession and pharmaceutical industry to place the health and welfare of the American public first by publicly recognizing and accepting the medical research of Dr. William F. Koch and the Koch Treatments. His medical research, which dates back to 1910, is documented in his books, papers and the thousands of pages of court testimony in two F.D.A. trials of 1943 & 1946 and the Federal Trade Commission hearings of 1943 - 1946.

The following are but a few examples of cases of record where the Koch therapeutic medications have established their medical value in the treatment of various disease conditions based upon Dr. Koch's theories on the "Chemistry of Natural Immunity."

1) Baby Judy McWhorter who was diagnosed with advanced cancer involving 85% of the liver and given a prognosis of only a few days to live in 1948 and who is alive today;
2) Mary Lou Barns, a 1948 polio victim;
3) Marie Blanchard Hall, Stanley Mosevich and Stanley Sanchez each of which had pulmonary tuberculosis (1943 & 1946 F.D.A. trial records);
4) Rita Long, retinoblastoma (Glioma of the eyes) (F.D.A. trial records);
5) Harold Barnard, endothelial sarcoma of the bone (F.D.A. trial records);

6) and so many other sick persons that have benefited from the Koch Treatment over the years. These facts were clearly established during the 1943 and 1946 F.D.A. trials and at the Federal Trade Commission hearings, by the Dr. Koch and the many doctors that he had worked with to restore the health of their patients.

An important matter, that should be of interest to us all, is the fact that in the 1920s the only standard, accepted and approved forms of therapy[77] for cancer [officially recognized by the American Medical Association and the American Society for the Control of Cancer] was a relatively ineffective form of treatment for well established cancer cases. This fact is illustrated by the increase in cancer mortality rates for the largest cities in the United States in 1929 as compared with the cancer mortality rates in these cities same cities in 1920. The exception to this rule was the City of Detroit where the mortality rate for cancer had actually gone down. For example, in New York this rate was 7% higher in 1929, Chicago (2% higher), Philadelphia (31% higher), Los Angles (32% higher), and Cleveland (11% higher) than the mortality rate was in 1920. It should be further noted that at the same time the cancer mortality rate for the City of Detroit in 1929 was 74.5, substantially lower, by 23%, than the mortality rate of 96.7 in 1920. This information was supplied by the Department of Commerce, Bureau of the Census, in a letter dated November 6, 1931[78] to Mr. Louis Koch. It should be further noted that Dr. Koch started his full time practice of medicine and the treatment of his cancer patients in late 1919 after he had resigned "from the chair of physiology of the Detroit College of Medicine and Surgery" in October 1919[79]. I believe that Dr. Koch's treatment for cancer was responsible for this cancer mortality rate reduction in Detroit from 96.7 in 1920 to 74.5 in 1929 which rate was substantially lower than the death rate from cancer in these other large cities.

Furthermore, with the world's present AIDS crisis and the Anthrax terror, the United States Government has a wonderful opportunity to apply Dr. Koch's medical research, in the chemistry of natural immunity, by conducting extensive medical research with his therapeutic medications to try and resolve these medical problems. The cost would be nominal compare to the billions of dollars the U. S. Government is now spending on AIDS, Anthrax and other diseases. I believe the results will be favorable. Such research would be beneficial to all of mankind.

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[77] X-ray, radium and surgery, see foot note 42, p.118.
[78] See Department of Commerce letter of November 6, 1931 to Mr. Louis Koch.
[79] See Dr. Koch's letter of October 17, 1919 to the Board of Education, page 26.

SOMETHING TO THINK ABOUT IN CANCER WEEK

BY REV. C. H. RUESSKAMP
St. Mark's Sanitarium.

One writer has said: "Unless the public is awakened to the danger of Cancer, one-half of the United States will be affected within the next hundred years." "Unless vigorous and fundamental measures, looking to the prevention as well as cure, are taken by the individual as well as the nation, we shall soon reach a state of physical degeneracy which will put us individually and nationally among the has-beens. We shall like Troy, Rome and Athens, go down and out and into ancient history."

These are earnest and true words and the increase of cancer at the present time with no help in hand should arouse every person to action.

"We lately read a handbook in which the assertion was made that "non-operative methods widely advertised by quack doctors (some of whom unfortunately are physicians), cannot cure cancer." It is this statement we challenge. The writer of this article has seen cures by a method which did not call for operations and stands ready to produce the cases at any time. In an advertisement on another page we quote the statements of leading men on what an operation does for a patient who has cancer. It speaks for itself. Operations cannot cure cancer. Radium is so destructive that few dare recommend its use at this time; the x-ray holds the same reputation. It cannot cure a cancer. There may be some hope in an early recognition of a pre-cancerous stage though we doubt even this. But once a cancer has developed, operations, radium and the like do not cure.

We have for years sought to bring our treatment to the attention of the profession with little or no result, not because we had no cure and could not demonstrate it, but because there was a condition which closed its eyes to results and refused to admit it in the face of evidence, yes, a condition which made such blunders that we feel constrained to protest against its further plying on the public under the guise of science when in reality it is the grossest sort of ignorance. Human life is too precious to be trifled with and the cancer expert should at all times be open to encourage each and every effort to defeat this horrible enemy of man, cancer. But, alas, we did not find it so, this thought gave birth to the St. Mark's Sanitarium. It is bound to lift the fair mind into the conviction that an ordinary case of cancer which comes to us and which has not been bungled by radium and knife will be cured. Our treatment is chemical and has cured hundreds who were sent home to die after operations and radium had failed. Most cases which come to us were bungled cases and we established the efficiency of our treatment with cases which have a hospital record and were bungled with radium and the like.

sand explanations found to do away the evidence, yes, conclusive cases were not even mentioned by reputable journals. How these act we desire to set forth in a fine example. In the Evening Times of Detroit, July 25th, there appeared the case of Rebecca Felhandler, of 9254 Cameron avenue, Detroit. She had suffered for 8 years. Joint and spinal tuberculosis was slowly killing this girl. Her leg was in cast and the joint revealed a running sore. She hobbled on crutches. But we quote the Times. "Then came a day when a big knob appeared on Becky's spine. It had been growing gradually, stealthily creeping upward and fastening on the tender tissues of the weakened back. The doctors shook their heads when they saw it. another operation was necessary, a very delicate and dangerous one, requiring long weeks in the hospital and the best of care. They estimated the cost of treatment at $1,000.00. So the Times resolved to send Becky to Ann Arbor. When we read this in the Times we resolved to help Becky and begged the Times to let us have the case. The Times consented and we began treatment about July 27th. In September when her playmates started for school, Becky was among them; she is cured. Her crutches are in our study so are the casts. But it seems hard to get anyone to tell the story. We have asked that the matter be investigated but, alas, no response. It might be good to pay us the $1,000.00 if recognition is not to be given for ability. But there is the rub. She is cured and all the world is silent. Any reader who will look into this will find this case a remarkable sample of humanitarian acton on our doctor's part but a strange conduct on the part of those who know this was done and who withhold credit. This was done in St. Mark's Sanitarium in the month of August. We are pleased to know that the parents are pleased because we saved her from the knife, restored her and effected a cure.

Well, we are glad to have men who are cranks enough to do such things and who can hold out against the cry and current of inferior minds. Milton says: "Let truth and falsehood grapple." Who ever knew truth put to the worse in a free and open encounter. For who knows not that truth. All we ask is a fair trial. While the failure to see the truth may cost many lives it is a satisfaction to know that it would be hard to name any great discovery that won recognition faster than did this one—OUR CURE FOR CANCER AND TUBERCULOSIS.

It would be the highest quackery to attempt to define the higher claims of our treatment without reserve an qualification. It should suffice to place before the public and the profession the evidence which proves that at any rate results of the most merciful and invaluable kind have actually been obtained in cases far beyond our own expectation, results when knife and any other mode of treatment had failed. But it can hardly be a fair test of our treatment to come to us after all other means have been tried. Such cases may get results but when the patient is exhausted and the case has advanced beyond repair, it is not fair to hold us responsible. We will even then do our best but the failure must be traced to those who gave delayed advice. A patient who comes to us after radium, X-ray and operation have been resorted to, really comes to us with four ills. In addition to the original trouble, cancer, he also suffers from the destruction of operation, radium and X-ray. Yes, we have cured such but do not forget they paid the penalty for it.

When we claim that we have a cure for cancer, those who are educated along their own lines raise a very loud cry amid which we discern the words crank, quack, fakir. Simpson and Pasteur and Lister were called cranks in their day and our doctor was called this so often that we are accustomed to the term. Of course, a man seems to be a crank who has ideas of his own on any subject. But when thousands of students have been working at a problem for decades and their united labors have amounted to nothing substantial at all, the man who has peculiar ideas is the man wanted. Our doctor has solved the problem of cancer, by making a discovery which was the result of hard study. Until the facts were known he was called a crank, articles submitted to journals regardless of cases submitted, were disregarded, a thou-

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

November 6, 1931.

Mr. Louis Koch,
Koch Cancer Foundation,
7835 East Jefferson Avenue,
Detroit, Michigan.

Dear Mr. Koch:

As requested in your letter of October 28, I submit below a table showing the death rate from cancer in the five largest cities in the United States in 1920 and 1930.

Five largest cities 1930	Death rate from cancer 1929	Five largest cities 1920	Death rate from cancer 1920
New York City	115.4	New York City	107.9
Chicago	107.0	Chicago	104.9
Philadelphia	135.8	Philadelphia	103.9
Detroit	74.5	Detroit	96.7
Los Angeles 1/	128.1	Cleveland 2/	93.8

1/ In 1920 the rate was 96.8.
2/ In 1929 the rate was 104.2.

Very truly yours,

T. F. Murphy

T. F. Murphy, M. D.,
Chief Statistician for Vital Statistics.

FPL:fd.

1920 & 1929 Cancer Death Rates
For following Cities

City of:	1920	1929	Percent change
New York City	107.9	115.4	+ 7% ↑
Chicago	104.9	107.0	+ 2% ↑
Philadelphia	103.9	135.8	+ 31% ↑
Detroit	96.7	74.5	- 23% ↓
Los Angeles	96.8	128.1	+ 32% ↑
Cleveland	93.8	104.2	+ 11% ↑

Demand a Show-Down in Cancer

On August 18th, 1948, the U. S. government dismissed its case against Dr. William F. Koch after two unsuccessful attempts to convict him of mislabelling his remedies. And now, having failed to convict this able physician of any wrong doing, the government is continuing to hamper his efforts to render service to humanity through bureaucratic interference, as evidenced in the recent seizure in Chicago from George Franklyn Smith, M.D., of all the Koch remedies in his possession.

This treatment, so well described by Senator Langer in his speech before the U. S. Senate, is the same which was demonstrated before the Yale Medical School by Professor Maisin of the Cancer Institute of the University of Louvain; the same which was long ago proven to the staff of the Jackson Laboratory in Bar Harbor; the same which has been curing cancer of all types for over twenty-five years; yet so great is the power of the medical trust in its desire to protect the practices of those who burn and scar with X-ray and radium, and mutilate with surgery, in removing the superficial evidences of cancer, that no one is permitted to reveal or practice anything of real value in its cure.

A CURE WILL NEVER BE FOUND

so long as billions of dollars are being made from these ineffective, but lucrative methods of treating cancer; never, so long as millions are being dropped into the lap of research, where to find, would be to lose one of the most profitable occupations of all time.

To read the statement on Dr. Koch appearing in the September 6th issue of TIME magazine is to sample the venom that is being poured into the hearts and minds of the American people, putrid, malicious propaganda to uphold the vested interests of organized medicine.

What is being done with the millions collected by Walter Winchell for the Damon Runyon Cancer Fund? Is he making merry with research which seeks, but never finds; which promises, but never tells, or, will Mr. Winchell be able to tear down the iron curtain of cancer, which is withholding so much from an agonized world of suffering? The American people are being fed up on promises of things to come, while real cures, such as those of Koch, Hoxsey, Holder and Blass, are being fought with everything they have.

A PUBLIC DEMONSTRATION

Let this matter be settled for all time by a public demonstration, which will show who can cure cancer, and who are guilty of a breach of public confidence.

In a properly supervised national clinic, let ten cases of cancer of similar type and condition be placed under the care of those who claim that they can cure the disease; ten under deep X-ray; ten under radium; ten under surgery; ten under Koch; ten under Hoxsey, ten under Holder; and ten under Blass. From this open demonstration, America should learn the truth, but the fly in the ointment is that organized medicine will never consent to such a program, unless in the interest of humanity,

THE AMERICAN PEOPLE DEMAND A SHOW-DOWN

with Koch, Hoxsey, Holder and Blass competing with the best that organized medicine and their research scientists can produce. Then will the people truly learn, WHO'S WHO in the CANCER WORLD.

We must move the center of activities, from gilded laboratories with their tortured animals, to where dying human beings will be relieved of suffering and assured of recovery.

Sea Croft,
Bar Harbor,
Maine

A FITZ ROY ANDERSON

CHAPTER 16

DR. KOCH'S LAST PAPER - 1967

Though at first, Dr. Koch's medical research started with the investigation into the function of the parathyroid glands, this research opened the door to his cancer research and a related matter, **the chemistry of natural immunity**. By conducting a detailed study of each of his cancer patients' medical history and by noting all of the prior illnesses each patient had, he often found that as the patient's cancer developed the symptoms from some of these prior illness would disappear. He further noted that in some cases, as the patient went through the recovery process, these disappearing symptoms of prior illness would once again return for a short period of time and then disappear as the cancer was being metabolized and removed from the body. These observations made it apparent to Dr. Koch that these prior illnesses were a precursor to the individual's cancer. Dr. Koch subsequently studied the therapeutic effect of his treatments on these and other disease conditions where the body's natural immune system plays an important role in the preservation of health. Thus he found that he could obtain therapeutic effect in the treatment of many other diseases including tuberculosis, poliomyelitis, allergies and infections with his medications.

Just prior to his death, in December of 1967 at the age of 82, Dr. Koch wrote a review of his life long search for basic medical truth in his service to humanity. I quote in part from of this paper.

THE FUNCTIONAL CARBONYL GROUP IN PATHOGENESIS AND ITS REVERSAL

"INTRODUCTORY STATEMENT"

"In tissue chemistry there is scarcely a reaction that does not involve or produce a **carbonyl group** as an intermediary or as an end product. And yet its significance in energy production has been overlooked, except in a passing way, by nearly all biochemists. Many **carbonyl groups** do not hold vitally critical positions, and indeed only a few are of deep interest to us. However, these take preference above all other carbonyl groups in the tissue metabolism by the fact that they are `activated.' By activation, we mean that their inherent properties have been accentuated, giving them the advantage of being able to carry through all the reactions they are disposed to mediate.

"One property is the electro-negativity they possess by virtue of being able to attract and accumulate electrons in the carbon-oxygen double bond. These are mobile electrons, and are designated by the Greek letter pi (¶), which are enhanced by migrations of electrons from other electron-contributing groups in the molecule and by electron attracting groups that influence external electrons. For our short discussion we must avoid the many other associated properties though they admit of mathematical expression and hold a great theoretical interest. Those that we will deal with are of high interest to us in matters

of health and happiness, our ability to maintain good vitality, and because of the place they hold in the cure of all forms of disease as it affects all cellular life from the smallest micro-organisms to the highest adult tissue cells. They hold the position of a least, common denominator by initiating the normal aerobic metabolism of function and nutrition, and hence their unabridged activity eliminates parasitism in micro-organisms and tissue cells and the virulence associated with pathogenicity.

"They thus hold a key position in the great biological economy, and this is due to the fact that they serve as the initiators of oxidative energy production for function and nutrition. And when not blocked in this action, they do away with the need for parasitism in micro-organisms and in tissue cells, and thus also when this ability is restored, pathogenicity is eliminated from bacteria, and neoplasia can no longer exist in tissue cells. So the best way to get rid of infectious disease and neoplasia is to cure the germ or tissue cell of its metabolic deficiency. The purpose now is to show how that is done."

"SOLUTION BY DATA FROM THE PARATHYROID INSUFFICIENCY PROBLEM"

"This study was started over a half century ago (1910) when present day techniques of high refinement did not exist, nor did the established theories on atomic structure that are in common practice today. One had to accept data one met and it was necessary to interpret it on the basis of crude results one was able to elicit.

"It was back in 1912 when the writer was given a position of opportunity at the University of Michigan laboratory and budget facilities that provided facilities to investigate the function of the parathyroid glands. The subject had been investigated by the eminent physiologist Carlson of the University of Chicago, and by others who reported that the parathyroid glands controlled the calcium metabolism of the body. They based the conclusion on the finding that the fatal convulsions that followed removal of these glands could be ameliorated by injections of calcium solutions and because excessive amounts of calcium were eliminated in the urines during parathyroid deficiency.

"However, it was evident to one, that other solutions of salts as sodium chloride and even distilled water also ameliorated the convulsions but only so long as the kidneys could eliminate, and the same fact held for the calcium injections as well. So it was evident that the benefit came from washing a toxic convulsion producing substance from the blood until other changes took place that blocked liver and kidney function. One therefore set out to isolate the toxic substances from the urine that caused the convulsions and other fatal changes observed at autopsy. These were primarily a loss of the colloidal dispersion of the blood contents so that they separated as striated clots in the large veins and capillaries before death took place.

"Analysis of the urines after parathyroidectomy in dogs yielded two toxic bases, methyl guanidine and guanidine that were present in fatal amounts and which caused the fatal convulsions and the other pathological changes. The results were published in the **Journal of Biological Chemistry** of 1912 and 1913, and were fully confirmed 3 years later by the department of physiology of the University of Glasgow, and for the excellency of their work in this confirmation, they (Professor

Patton and his staff) were awarded the Triennial Prize in Medicine from Harvard University. My work was thereby confirmed and I set about learning how guanidine did its mischief.

"One significant finding was that the urines carried large amounts of lactic acid which meant that the oxidation mechanism was too badly handicapped to provide the energy for the tissue activities including the convulsions. So, too, the autopsy findings of striated blood clots meant that the tissue colloids were not sufficiently charged to give them good dispersion especially in the blood which let the elements settle out, and also reduced their fluidity and carrying power of oxygen, calcium and other elements. So the sum-total meant that the oxidation mechanism was blocked by the guanidine bases.

"Two facts stood strikingly in mind, namely that the amine groups of guanidine were highly activated by conjugation with the imide group which made them highly reactive toward condensing with carbonyl groups to form axomethine condensations, whereas when the nitrogen atom of the imide group was replaced by oxygen as in urea, these urea amine groups were not-toxic, and did not bother anything. The second striking fact was that carbonyl groups could inactivate them. So it appeared that guanidine had, with its two amine groups, condensed with and inactivated two united carbonyl groups. So one provisionally concluded that guanidine had blocked the tissue oxidations and thus the tissues that survived longest after parathyroidectomy were richest provided with a two chain carbonyl group system that started the tissue oxidations, and the longest surviving tissue was observed to be the heart muscle. So in heart muscle one expected to find an activated carbonyl group as referred to previously, a group that took the preference over all the other carbonyl groups as a dehydrogenator, for the double bonds of each adjacent carbonyl group must activate the other, and increase the electron content in its small area.

"So one concluded that heart muscle carried the two adjacent system of carbonyl groups, (one may look upon this system as one in which the double bonds of one carbonyl group are conjugated with those of the adjacent carbonyl group by the covalent bond in between). The next step was to see if such a carbonyl system aided an inhibited oxidation. It was found that after removing the pancreas no changes took place, for indeed the pancreas had to remain in the animal, and that the pathology was essentially there and not in the tissues in general.

"It appeared also that in cancer growth there was no appreciable function, as seen also in their anaplasia, so evidently the carbonyl system was absent. Indeed the carbonyl activation could not be by conjugation with other double bonds as of an ethylenic linkage, so we treated far advanced terminal cases of cancer in three instances where early autopsies were expected, so one could study the changes that followed administration of activated carbonyl groups. Extracts of heart muscle were used and the responses confirmed the hypothesis. All three patients recovered. Then the smallest possible molecules with carbonyl activated by conjugation with other carbonyl group double bonds and with ethylenic double bonds were also fruitful. The heart muscle extracts were reported in the ***Medical Record of New York***, on October 30, 1920, and the attempts to make further reports were blocked by the requests of the **Journal of the A.M.A.** made to the official journals to refuse me the right

to report my findings further. This blocked further contact with the profession in the official literature, so when the Cancer Quack conventions of the A.M.A. annually proclaim that the sign of the quack is his refusal to report his work in official journals, they are putting on a gigantic fraud. It was so in my case.

"The patients treated with glyoxal and methyl glyoxal and by parabenzoquinone as the molecules offering **least steric** hindrance were put into use in 1918, and especially in 1919 in the official A.M.A. 'investigation' of the treatment, and then were augmented by the use of longer chains of carbonyl groups as in rhodizonic acid, triquinoyl and the long straight chains, all of which are described in the text, *'THE SURVIVAL FACTOR IN NEOPLASTIC AND VIRAL DISEASES.'* The object was to build up the highest carbonyl negativity possible, and indeed in triquinoyl this is attained to such a degree, that the electron content is so high that the molecule is highly unstable and one of the carbonyl tends to jump off and reduce the electron tension.

"Later we produced diphenoquinone in which the two carbonyl groups are widely separated, but five intervening ethylenic linkages are in conjugation. This molecule has an oxidation-reduction potential of 0.954 volts as compared with that of parabenzoquinone with its good 0.7 volts. Obviously the dehydrogenating power here is all that is needed to dehydrogenate any member of a biological system, and the dilution of the former must be made appropriately higher than that of para-benzoquinone for treatment uses.

"Using the most vigorous dehydrogenators may cause such rapid breakdown of large cancer masses that the products are absorbed more rapidly than the destroyed areas can be healed with normal parenchyma, and when blood vessel walls are involved, serious bleeding can take place. It is therefore advisable to use high dilutions of such substances as Glyoxal, Methyl Glyoxal, triquinoyl and diphenoquinone which are used in concentrations of preferably 10^{-9}, or 10^{-12} and even as high as 10^{-30} concentration, whereas benzoquinone can be used very nicely in 10^{-5} and 10^{-6} concentrations.

"And even though cancer tissue undergoes rapid lysis and adsorption, the process is not a destructive one, but a corrective, constructive one. The reason for a highly rapid disappearance of a malignant tumor instead of slower one is that more cancer cells are being corrected and absorbed than the healing power can compensate for in a given time. Likewise, in cases that have been heavily irradiated with cobalt isotopes or radium or X-rays, the rapid absorption of the irradiated material may be too great in amount for the patient to contend with systemically, and such cases should be treated with great care if at all.

"Recent cases of cobalt application should not be treated, and time must be awaited until the cobalt effects are worn out as seen by the recurrence of neoplastic progress in the treated lesions.

"All of these troubles we avoided by taking our time. Indeed, once the recovery is started it tends to go on as a chain reaction until all traces of neoplastic tissue is digested and absorbed, and understanding that the recovery process is based on the phenomena of the Free Radical, we clear the field of all interfering factors, and let the recovery go on leisurely to completion. So it was when one treated the five officially chosen terminal cases of cancer that served as test cases in the 1919 official

A.M.A. investigation, one is satisfied to give only one injection of the remedy and await the results. These results came quicker than the official A.M.A. surgeon committee had expected, and on seeing a man 72 years of age covered and filled with countless masses of sarcoma, one member of the official committee was panic stricken by the rapid absorption of the cancer growths and advised him to hurry back to his home 300 miles away, for if Koch gave him another dose, he would melt away just as the growths did. He lost no time in leaving. Later it turned out that he was cured, for many years afterward patients came from his town because of the benefits he received from the treatment.

Likewise, the other cases, the four that were left made such startling improvements from their suffering hemorrhagic cachectic conditions that the rest of the committee went panicky and closed the investigation, sending the patents back to their distant homes even to other states with the warning that they were forbidden to receive any further treatments from Koch. However, the phenomena of the chain reaction based on Free Radical properties kept on working and three of these patients were completely cured. One of them that I could observe for 15 years, a stretcher case when brought in to the ward, lived 15 years in perfect health and died as the result of an accident that fractured her skull. But though there were at least 60 per cent, or most likely 80 per cent, of the patients cured, the official A.M.A. committee reported that nothing came of it, and denounced me ever since as a quack. Then, four years afterward in the fall of 1923 when I asked the Medical Society to change their false report to conform to the truth, they refused and abused the effort with further innuendo and falsehoods.[80]

"My thesis suffered further violence following the demonstrations of its therapeutic efficiency in Brazil in the summer of 1941, when under the auspices of the Medical Faculty of the University, as led by Professor Renato da Souza Lopes, we cured moderately advanced leprosy, advanced cavitary tuberculosis, terminal cases of cancer of the liver and stomach, terminal cases of rheumatoid arthritis, diabetes, and incurable terminal insanity. The Drug Monopoly led by ~~(...its local representative in Brazil...)~~ threatened me with utter extinction so I would never interfere with their affairs down there any more. Three weeks later I was ordered by the U.S. Food and Drug Administration to return to Washington to discuss my labels. I went, and on Good Friday of 1942, I was indicted at Detroit, by a secret closed Grand Jury, without my presence, for fraud and arrested at my home in Florida the same day. Only recently it was from a member of the Grand Jury that I learned that the indictment was won on the testimony of two (~~...of the Drug Monopoly's...~~) chemists who swore that my therapy was a fraud and nothing more than distilled water.

"The next morning at setting the bail, the District Attorney of Miami requested a $10,000 bail, which the judge thought excessive and required

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[80] From Dr. Dewey's letter of October 24, 1925 to Dr. Koch; p. 40.

"For a studied intent to falsify, a premeditated determination to condemn everything, and an unscientific, un-American assumption to be judge, jury and prosecuting witnesses, the report of this so called committee outstrips in bias, unfairness and mendacity anything that has ever been my lot to observe in a medical practice of forty-four years."

an explanation. The D.A. answered: 'Last night the D.A. at Detroit who won the indictment phoned me to insist on a $10,000 bail as Dr. Koch had started work in Brazil and we do not want him to go back and finish it.' And then turning to me with a grin of glee he said, 'And when the U.S. government gets through with you, Koch, you will be all washed up and not able to go anywhere.' The bail was reduced to $5,000.

"The first of all scientists to demonstrate the existence of the Free Radical in chemistry was Dr. Moses Gomberg[81] and he demonstrated its salient properties. This was back in 1900, when he was professor of chemistry....In 1910 he was my professor at the University of Michigan. His finding which was the most important of the century was much discredited for years, and him with it until the plastic industry that is based on it grew to become a financial giant. But up to 5 or 10 years ago, interest in the Free Radical was held practically—only by a few gas-phase kineticists, and plastic experts. The medical and biochemical professions had entirely passed it by, and from that year up till now to speak of the Free Radical to them was an invitation for abuse.

"Indeed as recently a 1946, Dr. Willard Dow, president of the Dow Chemical industries and an expert in Free Radical Chemistry stated,– 'Koch is so far ahead of the thinking of his profession that he is not understood and they even ridicule him at times.'

So to get my thesis across was absolutely discouraging and even dangerous. Indeed it was on the advice of Dr. Mitchell, long time chairman of the Board of Trustees of the A.M.A., who had investigated the treatment personally himself with curative results, that I kept silent about the therapy, for he told me earnestly in 1924 that I should never tell the basic facts of my thesis, for they could not be understood by the profession and their experts, and they would know no better than to brand them as base frauds, – my most precious truths; and **that** would ruin me in a court trial the Journal A.M.A. was waiting to pull on me. It would jail me and put an end to the work. In fact this is what the A.M.A. bureaucratic contingent of their conspiracy actually tried to do in 1942 and 1946 in two five month Federal Court trials of daily sessions. But fortunately I had kept my precious Free Radical Thesis under cover and the conspiracy lost its attempt both times. Thereafter I tried out the Free Radical Thesis on men who should have been interested, but it was not until the Great Szent-Gyorgyi spoke of a possibility of free radicals having something to do with cancer five years ago that the profession took a deep interest in it, and now every advanced laboratory world-wide is making wonderful progress with the investigation of Free Radicals. In fact recently the Henry Ford Hospital of Detroit announced the discovery of a Nitrogen Free Radical as diagnostic of cancer, using the electron-spin resonance spectroscope technique as the means of finding it. So our earliest work of a half century ago is meeting with successful confirmation today.

"What is the position of the Free Radical in carcinogenesis and its reversal? Please recall that the activated carbonyl group of function, the FCG for short, dehydrogenates fuels and pathogens that enter its field to oxidatively destroy them to liberate energy. If now the dehydrogenation of a virus or carcinogen takes place in the absence of adequate oxygen, the Free Radical that is formed must add to something other than oxygen

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[81] It took 100 years to officially recognize his research; See footnote # 57, p. 143.

and the closest position it can take is one of the poles of the double bond that activates the FCG, and here it makes its addition and thus becomes integrated with the energy-producing mechanism. If it is a virus that makes the addition, it is in a favorable place to take energy from the host cell to support its vegetation, and after the cell is exhausted of energy and material, the viral progeny are set loose to swarm outside and infect other cells.

"Cancer cells however undergo many reproductions themselves with the virus in symbiosis with it and liberate a comparatively small amount of viral progeny. And of course when the cancer cell dies and breaks up, the virus colony is liberated and can infect other cells of the same type. Even the paralyzing viruses may not always cause a lytic destruction of the host cell but may live in symbiosis with it. Both are inactivated by the Free Radical union they hold as we described.

"They behave as if dead, as neither can receive the energy required for activity. The situation is described in the SURVIVAL FACTOR BOOK. However, both are alive and when a sufficiently energetic carbonyl dehydrogenator comes along, it dehydrogenates the pathogen at its point of integration, and here the free radical formed adds molecular oxygen and is split off, leaving the host cell in good functional status while the virus is oxidized further destructively. The return of function too fully paralyzed atrophied limbs for as long as 20 years, with perfect muscle reconstruction demonstrates this fact.

"Evolution is a subject of many conflicting and imaginary theories,. But one thing is certain that every physician must know. It is that no species can evolve into another species, as the proteins of each are most exquisitely so different that they mutually destroy each other on contact either by a lytic or an agglutination process. So no species can develop into another or ever hybridize with it. However, the patterns of many vital processes may be common to many different species, each modified somewhat to accommodate an adaptation to the environment in which it has to survive.

"The oxidation process is one example where a common pattern is evident in many species all the way from the simplest micro-organism to the most differentiated cell of mankind. We described it before. This is not an evolved affair but a universal creation common to aerobic life. Then it is also evident that any interference capable of blocking the oxidation mechanism of one species may also have the same effect on some other species. The inactivation of the functional carbonyl group of a micro-organism may also follow the same pattern of interference as in a human tissue cell. And consequently, the pattern of removal of the interference should apply in both in the like manner.

"Interference with bacterial specific created function in the biological economy must also interfere with nutrition, and to survive a similar pattern of parasitism will be adopted and only altered as differences in environment may dictate. And then too the restoration of an efficient oxidation pattern as we have described must restore both function and nutrition, and so parasitism is no longer possible. Virulence is also eliminated since there is no need to attempt survival by cell reproduction. This thesis is demonstrated abundantly in the Survival Factor text. Two examples taken from it will demonstrate the thoroughness of its proofs.

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"The first exhibit is a culture plate divided into halves to accommodate the test culture on one side and the control culture on the other. Both were seeded equally with highly virulent hemolytic streptococcus taken from a child, and was highly antibiotic resistant. The test culture was exposed to a solution of the reagent of the text carrying serial systems of carbonyl groups, diluted one part to a billion parts of water in an amount of only one cubic centimeter. The control culture was not disturbed. They were incubated for two weeks and thereafter it is seen that the control culture was heavily invaded with the streptococcus, while the test culture was free. Thus the virulence was wiped out by the reagent. Many tests of the filtrates from such cultures have been made and while the test cultures are nontoxic, the control cultures in equal dilutions are fatally toxic. So the restoration of active carbonyl facility restores health to the organism. It shows no virulence nor pathogenicity. Observations on living animals show that it shows normal biological function.

"The other exhibit is of a baby girl (Judy)[82] of only four months of age, who on exploration of the abdomen was found to have a grade IV primary cancer of the liver, 80 percent of which was involved and of course the whole abdomen besides. She was given the same dosage of the same reagent used on the culture plate. Here the pathogenicity, virulence and parasitism of tissue cells are seen to be reversed to normal by a chain process mediated by the Free Radical sequences initiated by an activated carbonyl group. The chain reaction was not completed until every vestige of neoplastic tissue had been reversed to normal and then digested and absorbed as food material, which, of course, nourished the baby. The photographs show the steady progress of this reaction complex to full normalcy, and, of course, completely and permanently on but one dose of the reagent in a terrifically high dilution – one part per billion. Two months ago she was happily married. So here in animal tissues, the restoration of carbonyl energy produced function is seen to dispose of neoplasia with its pathogenicity, its virulence and its parasitism."

THE PROFESSIONAL- POLITICAL SITUATION

Evidently the Created Pattern of Aerobic Life includes a Redemption principle of protection expressed as tissue instinct, and issuing from an Infinite Wisdom, that any observing biologist must recognize. The complex is Triune, embracing the cardinal features of Christianity. In fact, the first lessons in therapeutics were given by the Good Creator Himself in the Garden of Eden when He told mankind to look to the plants for their cures of the diseases that would come on them. So I searched for the evidence and found it, in six trees, two in each of Africa, Australia, and Brazil. These are curative in cancer and other diseases, as is evident in the chemical structure of each, as they all conform to the rules of structure laid out in this thesis, even though the Australian and African products have not been identified with any medical properties. But the two Brazilian products have been used from time immemorial by the natives for cancer and all other diseases with success. The chemical structure of

[82] See The McWhorter Affidavit, p. 110.

the Brazilian product has not been worked out except as by myself, and published some time ago in the German Edition of the Survival Book, and also in the English edition. They are all chromophoric, quinones, naphthoquinones, and exist as para and ortho tautomeres.

They thus present carbonyl activated by adjacent carbonyl groups in the ortho forms and by ethylenic conjugated linkages in the Para forms. These we have found curative in cancer and infections for many decades as well as in the terrible degenerative diseases as Friederich's ataxia and multiple sclerosis that are recognized as incurable. So here too the Good Redeemer Creator has given us activated carbonyl groups, as the first lessons of Religion that we practice as medicine. They are inseparable, and are protected by the U.S. and all other civilized nation's Constitutions. The atheist practices religion when he uses them.

A leading U.S. Senator a few decades ago appealed to the Lord for help when he was going hopelessly blind. His cure was the practice of religion, for I gave the injection that cured him. But he feared to identify the humble discredited agency of his blessing in the face of an opposing powerful Drug Monopoly. Hence, men must organize a strong committee to give strength to the legislators who tremble always before the drug racket. They need strong support, and this Association of Friends of the Cancer Victim can give it.

OFFICE OF THE VICE PRESIDENT
WASHINGTON

February 18, 1944

Mr. George H. Maines
209-211 West First Avenue
Flint 4, Michigan

Dear Mr. Maines:

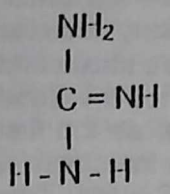
I have suggested to the Bureau of Animal Industry that they try out the suggestion in the next to the last paragraph of your letter. My guess, however, is that nothing will come of this.

Sincerely yours,

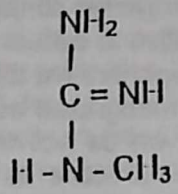
H A Wallace

H. A. Wallace

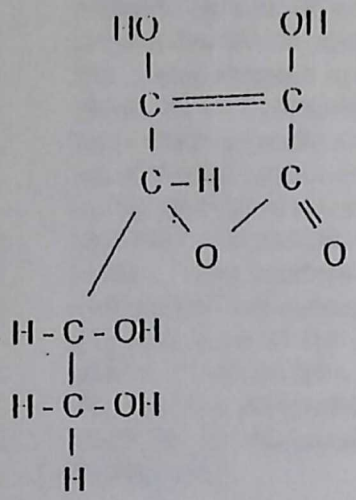
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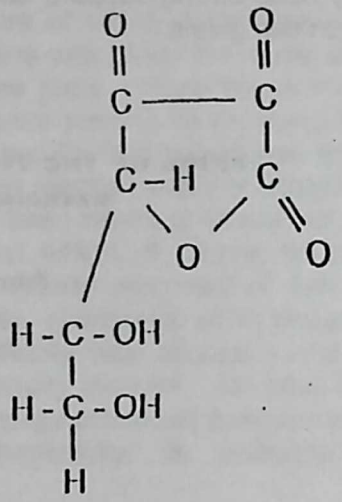
Guanidine



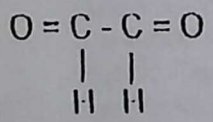
Methylguanidine



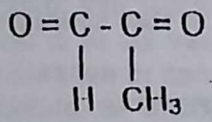
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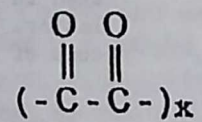
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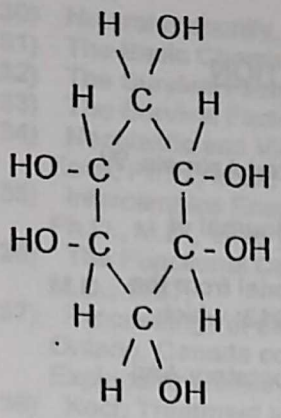
Glyoxal



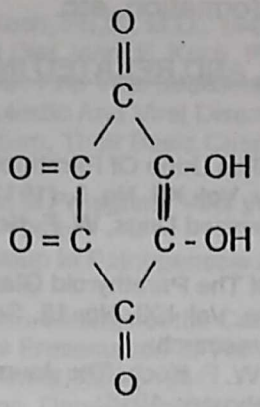
Methyl Glyoxal



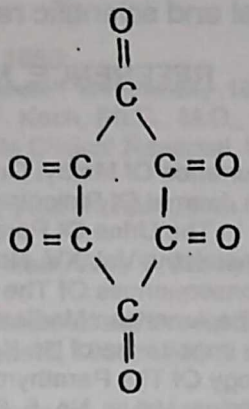
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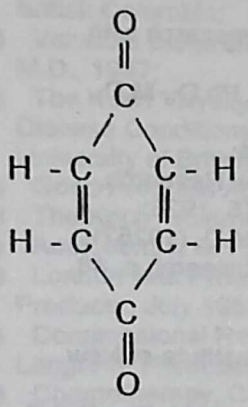
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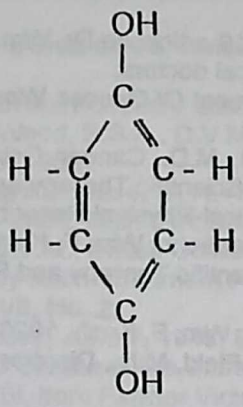
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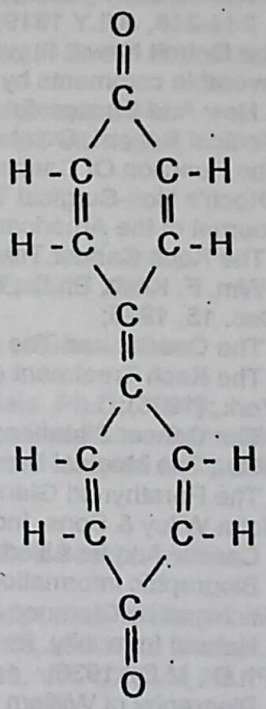
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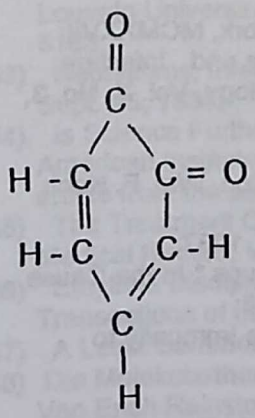
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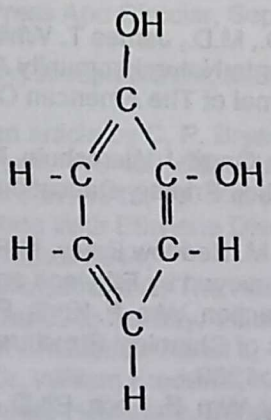
Hydroquinone



Diphenoquinone



Ortho Quinone



Catechol

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ate by a special electron-transport mechanism, and so the vitamin is not destroyed. [Thru this type of chemical reaction, a free radical structure is formed and is the same time of reaction that occurs when p-benzoquinone is converted to hydroquinone the reverse reaction when hydroquinone is converted back to the quinone structure.]
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RESEARCH PAPERS

Tetany And The Parathyroid Glands

Wm. F. Koch, Ph.D., M.D

Medicine and Surgery, January, 1918

From a perusal of the literature, one must recognize that a few facts of value have been contributed on this subject, but that the findings have not been discussed from a physico-chemical basis; and therefore the physiology of the parathyroids share the same obscurity as the other glands of internal secretion. However, in the light of certain confirmed observations and with a working hypothesis regarding their phylogeny, we can make some rational but uncertain surmises as to their function, recognize the syndrome of parathyroid insufficiency, and draw conclusions as to therapy.

We have long been possessed of the view that the various glands of internal secretion were among themselves very antagonistic structures. But I fear that such a view has inhibited rather than promoted progress; and when more observations, such as those of Stewart and Rogoff [1], have been made, we find that the co-workings of these glands are one of harmony. In line with our accepted theories of differentiation and specialization of function of the various tissues, it is easy to build a simple hypothesis of the phylogeny of the glands. I will give one here because it explains the observations which follow below according to a principle more acceptable to our evolutionary scheme than does the theory involving antagonism and because it suggests what direction future work on the parathyroids should take.

In the unicellular organism all functions are carried on by the same protoplasmic aggregate, but with the development and differentiation into multicellular organism certain special relations are interposed, and according to the environments of the component cells certain functions are stimulated and others are retarded. But all the vital protoplasmic needs are present in all the cells, and as environmental relations prohibit the carrying on of certain activities in certain cells these become parasitic upon those cells which have better environmental opportunity for pursuing this activity and thus a differentiation in function is attained. To illustrate: Take a three-layer stage Amphyoxus, the ectodermal layer becomes protective, the entodermal is quite protected and still in close relation to the external food supply, so it becomes a digestive tissue; and the mesoderm removed from external harm and food supply, need not develop a resistant structure nor differentiate into a digestive structure, but can differentiate along other lines, thus becoming contractile or what not. In order to obtain food supply it can remove from its immediate environment those diffusible nutritional substances which the entoderm has manufactured from external food supply. Likewise the ectodermal layer can absorb and use those substances from its environment which the middle layer elaborates. The possibility for such changes lies in the permeability of the cell membranes to diffusible substances as well as to homologous non-diffusible substances. Internal secretions then come into existence by virtue of the fact that cells selfishly manufacture diffusible substances for their own metabolic needs; but being diffusible they get out of the cell and can be removed from the exterior of the cell by diffusing into another cell in which the partial pressure of the substance is less, and this partial pressure will have a value depending upon how rapidly the substance is metabolized therein.

Now with a higher differentiation of the organism, up to where the vascular system is in operation, the same phenomena hold good and the exchange takes place

through the lymph spaces and blood-stream. The fact is the glands of internal secretion have the greatest blood supply of all the tissues of the body. According to this scheme, the blood carries diffusible substances which have escaped from all body cells. These substances diffuse into all body cells as fast as their partial pressure in the cells is lowered by their metabolization. And since the early environmental differential relations have determined a certain facility for carrying on a certain process, a differentiation of function has arisen. Thus we observe certain glands of internal secretion – thymus, parathyroids, thyroid, anterior lobe of the hypophysis, liver and the islets of the pancreas developing from the primitive digestive canal, and hence their disturbances of function are accompanied by well-defined dystrophies. The occasion may arise, however, where a tissue, very active for the time being, must obtain more substance from some internally secreting gland than the blood supply to the needy tissue ordinarily carries. So this tissue may develop an agent which it sends out into the blood and which when carried through the certain gland of internal secretion by chemical combination hooks onto the special product of this gland. Thus the partial pressure of the secretion about the cells of this gland is lowered and a diffusion of more substance to the outside of the cell occurs. The gland cell must then elaborate more of this substance to maintain its usual content.

In this way the output of any gland of internal secretion is regulated by the demand for its special products. The above hypothesis explains the following well-confirmed facts, -- the presence in the highly developed organism of glands secreting diffusible substances necessary to the normal metabolism of the rest of the organism, and that special products are immediately used up as fast as formed, that is, their reaction being quantitative. It is also introductory to the discussion of certain findings enumerated below. Yet since the hypothesis has been proposed it is necessary that it should answer all known facts; and I beg to digress for a moment to explain the position of the nerve supply to some of the internally secreting glands. Before the development of a nervous system, the chemical mechanism of coordination of all cell activities was naturally the only one, but as nerve control became potential, reflex trophic arcs with their afferent and efferent neurones, synapses, and modifying neurones had the same chance to develop as any other reflex arc. Although it remains for investigation to prove their existence, we find affirmative evidence in the phenomena of exophthalmic goiter, where indeed a psychoneurosis can be proved the cause of the hyperactivity of the gland.

SYMPTOMATOLOGY

The symptoms of parathyroid insufficiency may be described as depression with muscular twitchings and tremors, refusal to take food or vomiting after doing so, jerkings, tonic and clonic convulsions, spasticities with ataxia, exophthalmos, tachycardia, and hyperpnea. The central nervous system is hyper-irritable with a resulting increased stimulation of the voluntary muscles producing characteristic postural spasms, and convulsions. After section of the motor nerves to a part, these changes are abolished, but tremors and jerkings are observable, due to increased irritability of the myoneural junction, as was shown by Paton[2] and his co-workers. The hyper-irritability of the myoneural junction of the visceral nerves is also demonstrated by their abnormally high susceptibility to adrenalin. Because of the similarity in the postural changes in parathyroidectomized monkeys to that of children in idiopathic tetany and in man in post-operative hypo-parathyroidism, and since the mechanical and electrical reaction of the myoneural junction, the tremors, depressive convulsions and spasms are exactly similar in these conditions, it is concluded that they are identical syndromes. As will be shown below, the same etiological factor is present in these conditions, a fact which justifies the

conclusion. The Tetany and convulsions occurring during pregnancy and lactation,[3] other than uremic and hysterical, are also regarded as belonging to the same syndrome because of the similarity in symptomatology. With the termination of pregnancy or lactation the symptoms rapidly disappear, and so it would seem that they resulted from excessive strain upon the parathyroid function. Seitz and Thierry [3] find 10 per cent. of all women during the last months of pregnancy in a subtetanic state. I have recently seen an infant six hours old, delivered from a mother in non-nephritic eclampsia, that showed the carpal spasm, exophthalmos with Graefe's sign and Stellwag's sign and Chvostek's symptom. Evidently mother and child were under the influence of the same etiological factor, which in the mother resulted from a greater metabolic demand than could be satisfied, as is evidenced in the fact that removal of the child restored her normal metabolic balance. A study of her catheterized urine is now in progress. It differs from the normal in containing an exceedingly large quantity of lipoidal material and some of the guanidin bases which will be reported upon later. As will be seen below these bases are the etiological factor in the tetanies under discussion.

PATHOLOGICAL CHANGES

The pathology as I have reported previously[4] is in part an encephalitis with chromatolysis and edema of the cerebral cells, parenchymatous hepatitis and nephritis, changes in the endothelial cells of the blood-vessels, and ante-mortem coagulation of the blood. No doubt many other changes also occur. The findings of Wilson, Steams and Janney [5] show an increased alkalinity in the blood preceding the tetany and a temporary acidosis resulting from the tetany. MacCallum and Voegtlin [6] claim a decreased calcium content in the blood and brain. Cook's [7] analysis of such brains show no such calcium changes.

Many investigations have been undertaken to clear up the real mechanism of hypoparathyroidism. Two schools now hold very different views regarding its essential pathology. The older view of MacCallum, Voegtlin, Lambert and Vogel is that the condition is essentially a condition of calcium insufficiency, since they find an increased urinary output of calcium and a diminution in the soluble calcium salts of the blood. This latter claim is open to argument, for it is difficult to understand how a blood low in diffusible calcium content can carry to the kidneys so large a quantity of diffusible calcium that the urine should continuously have excessive calcium content. They base their conclusions besides on perfusion experiments, finding that by perfusing a normal animal's limb with calcium-free blood, and perfusing the limb with blood from a tetany dog, produces tetany therein, and that injections of oxalates cause tetany in normal animals because of precipitation of their blood calcium. [8] As will be seen from the following discussion, the findings of these later experiments show that calcium insufficiency has little to do with the essential etiology of parathyroid tetany.

The other view regarding the pathology of this condition is based upon the findings reported by the writer [4] several years ago, of the presence of guanidin bases in the urines of parathyroidectomized dogs in toxic quantities. The largest quantity of guanidin isolated was 9.8 mgrm. per kilo body weight. The toxic dose is variably 20 mgrm. per kilo body weight. Besides guanidin the alkylated compounds, methyl guanidin, di-methyl guanidin, and a substance which upon analysis appeared to be amino-butyl guanidin were also isolated. The alkylation of guanidin in this way is no doubt an effort at its detoxication. Now since the total quantity of guanidins in the urines exceeded that which was isolated, and since some must have been destroyed and some retained in the body, and since the quantity isolated exceeded the toxic dose, the quantity active at death was no doubt lethal. Furthermore, the symptoms of guanidin

poisoning are exactly those of parathyroid tetany. These findings of the author have been amply confirmed by the work of Paton, Findlay, Watson, Burns, Sharp and Wishart [2] in their studies on parathyroidectomy in dogs, monkeys and other animals, the idiopathic tetany in children, and the tetany in post-operative hypoparathyroidism. These observers studied the urine and blood content of the guanidin bases, and following my methods of isolation found in the urine an increase of them of from 100 to 500 per cent., and in the blood after parathyroidectomy an increase of from 400 to 1,200 per cent. They also showed that the excised muscle of the frog showed similar tremors whether bathed in guanidin solution or in blood obtained from parathyroidectomized animals, and that the point of action was the myoneural injunction. Their studies on the nitrogen distribution in guanidin poisoning, after parathyroidectomy in animals and in idiopathic tetany and post-operative tetany in man, show it to be the same in these conditions. The rate at which the guanidin bases are produced and the intensity of the symptoms also indicate that this substance is the etiological factor. My supporters find the average urinary output of 1.08 mgrm. of guanidin per kilo body weight in dogs with an average life of over ten days as compared to my findings of 9.8 mgrm. in a dog which died in three days. They consider this quantity excessive, but a more rapid intoxication is to be expected to be followed by an early death, pointing to this poison as the etiological factor. **We may therefore conclude** in concurrence with my first report on this subject **that the cause of the tetany is the guanidin intoxication of the central nervous system and the myoneural junction.**

In order to reach a therapeutic basis for discussion it is necessary to inquire into the source of the guanidin bases, the relation of acid and calcium injections to the production and action of this poison, and the relation of the guanidin intoxication to the nutritional changes. All these questions are answered by one fact – namely, the occurrence in the urines of parathyroidectomized dogs of methyl cyanamide. [9] This substance was isolated from the urines of 47 dogs after parathyroidectomy, though in exceedingly small quantity – namely, 1.2 grm. of the picrolonate of the cyanamide and 2 grm. of the picrolonate of its polymer trimethyl-melamine. I take this substance to be the mother substance to the quanidins, that it was excreted in a methylated form simply again refers to the methylation facilities of the organism for detoxification purposes, as occurred in the case of the guanidins. The methyl cyanamide then represents cyanamide. Both these substances add ammonia very readily and are thus converted to guanidins. Several factors in this connection are to be recalled: First, that a meat diet increases the severity of the tetany; secondly, that as Wilson, Stearns and Janney [5] have shown, the alkalinity of the blood increases up to the tetany point, when convulsions occur. Now during the metabolization of amino acids, whether from a protein diet or from the tissues of the starving animal, ammonia groups are produced. They generally unite with carbon dioxide to form urea, an innocuous substance, or with other acids, forming salts, but in this condition they have the cyanamides to unite with, and as a result the alkaline guanidins are formed, only shall quantities of the cyanamide escaping into the urine as such. When the threshold dose of the guanidins is reached, convulsions develop, and, through the attendant lactic-acid product-ion of the tetany, the acidity of the blood is raised and the ammonia can now join acid radicals, the cyanamides thus being prevented from forming guanidins. This is fortunate since the cyanamides, though very poisonous, can be easily hydrated, thus forming the nonpoisonous urea, or be disposed of in other ways. These observations also explain the findings of Wilson, Stearns and Janney, that before tetany appears the ammonia excretion is lowered, and after tetany the ammonia and lactic acid excretion is raised. The tetany then serves as a detoxication mechanism.

The relation of the calcium blood-content to the tetany of parathyroid insufficiency

is very simple. However, Voegtlin [3] of the Calcium School finds it difficult to understand why calcium administration does not continuously control the tetany. This question can be reasonably answered on the physico-chemical basis. In the perfusion experiments referred to above, calcium was withdrawn from the limb in one case; in the other, the toxic guanidins were perfused through it. The oxalate injections removed soluble calcium from the blood by precipitation. Now where the protoplasmic complex, with its normal content of bivalent and monovalent cations, has the bivalent cations removed, the permeability of the cell is increased, a lipoid is water phase being produced. Swelling of the cell then occurs, the diffusion of substances (substrate for ferment activity) into the cell and the diffusion of waste products out of the cell are facilitated, and as a result intracellular ferment activities are enhanced and the metabolism rate correspondingly quickened. The same conditions occur in acidosis. Thus the cells of the respiratory centre, influenced by increased carbon-dioxide blood-content, send out more powerful impulses to the respiratory muscles. Likewise the cells of the spinal cord, under the influence of asphyxia, cause through stronger impulses a greater vasoconstriction. With a slight acidosis, muscle cells likewise carry on greater metabolic exchanges, and in this was calcium withdrawal must produce tetany.

Administration of calcium on the other hand, conditions a water in lipoid phase of the protoplasmic complex decreasing the permeability of the cell, and thus its physiological activities are depressed. The only limit of this depression is the death of the cell through inanition. Incidentally, calcium administration thus diminishes the entrance of guanidin into the cell and lessens its activity. But with time the guanidin bodies enter the cell with sufficient accumulation to effect an intoxication, unless, of course, so much calcium is administrated that cellular exchanges are practically prohibited and death results from cellular inanition. Such a state of affairs the Calcium School has realized as a result of the calcium administration to control the tetany.

There is one factor which the literature has so far neglected – namely, the rapid excretion of lipoids. This indeed is fundamental both because of their large output and their properties. Their interest in this connection lies in their relation to cell permeability. The greater their loss from the body, the greater the cell permeability and therefore the greater the intoxication by the guanidin bases.

Certain findings regarding the effects of injections of methyl cyanamide necessitate a return to this phase of the subject. A first intravenous injection of a few milligrams per kilo body weight produces a fall of about 30 mm. Hg in blood-pressure. A second injection following the return of the blood-pressure to normal by 25 seconds produces no effect; only waiting about 40 seconds can a further drop in pressure be produced and this drop is greater the longer the interval between the injections. Thus the organism is for a time refractory in its reaction to second injections of this substance, a fact which means that the substance reacting with the cyanamide to produce this effect is slowly elaborated and that the reaction between the two substances is quantitative and therefore, hormone-like. It is interesting to note here that, experimentally produced, hyperparathyroidism is accompanied by a low blood-pressure. The excretion after parathyroidectomy of this substance signifies that it is produced in other tissues of the body than the parathyroids and that in the absence of their secretion it is not used. Hence we may conclude that the cyanamide is the agent which the body cells elaborate to react with the parathyroid secretion, and in the light of the introductory hypothesis it is the 'hock' they sent out to obtain parathyroid secretion for their metabolic needs. The findings of Halsted[10] and others, that parathyroid transplants only grow where a parathyroid insufficiency is present may be referred to the stimulating action of this substance upon the transplant. Such findings are confirmatory to our conclusion. The behavior of this substance also gives strength to our hypothesis in that it suggests an

explanation of the apparent antagonism between certain glands of internal secretion. Thus it is possible that the agent ("hook") sent out by a cell may bring to it more than one glandular product, and if this can be proved true, that is, if it can be shown that more than one set of glands is stimulated by it, injection into the body of the secretion of one of these sets of glands ought so to monopolize the agent ("hook") that stimulation of the other set of glands is suspended temporarily. The introduction of the above hypothesis regarding the mechanism of activity of the glands of internal secretion has brought up a number of problems for investigation. Thus administration of cyanamides and guanidin production after parathyroidectomy must be studied, as well as the effect of administration of the cyanamides upon parathyroid and other glandular activity.

TREATMENT

From the foregoing evidence, it appears that the only sufficient repair for parathyroid insufficiency is removing the need of increase parathyroid function, such as the emptying of the pregnant uterus, or the implantation of sufficient parathyroid material from the same species to make good any deficiency. The latter course, however, carries the difficulty of obtaining the planting material. The use of extracts of the parathyroid gland have been very serviceable in the experience of Beebe[11] and others. Yet their content of active material must be small, and because of its instability and difficulty in preparation it does not promise a ready means of therapy. Therefore, palliative methods alone are at present generally possible; and they lie in the protection of the cells against guanidin entrance by means of calcium therapy, and the lessening of guanidin production by acid administration. For it is evident that where alkalinosis is present, sufficient ammonia is also present to react with the cyanamides to produce guanidins in toxic quantities. The acid treatment has the advantage over calcium therapy in that it reduces the symptoms[5] without diminishing cell nutrition. It should be so regulated as to keep guanidin production below the threshold of toxicity without producing a distinct acidosis. All that is necessary is to maintain the normal electric neutrality of the blood. Of course, the findings of the careful clinician upon this point must determine its value. We are so hard pressed for therapeutic measures in this condition that the above remarks require application.

LITERATURE

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Exhibits
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