

Vol. 1

The United States Senate

Report of Proceedings

Hearing held before

Subcommittee on Patents, Trade-Marks and
Copyrights, of the Committee on the Judiciary

H. R. 2068

February 16, 1956

Washington, D. C.

WARD & PAUL

1760 PENNSYLVANIA AVE., N. W.
WASHINGTON, D. C.

NATIONAL { 8-4266
8-4267
8-4268
8-4269

S. 65,120
74
COPY NO. 1
NEW LIBRARY

aj

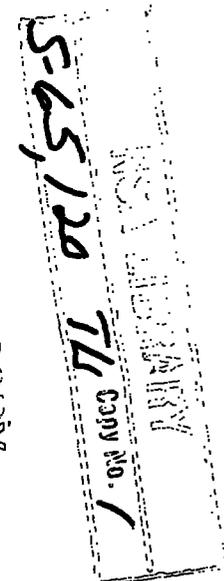
C O N T E N T S

<u>STATEMENT OF</u>	<u>PAGE</u>
Henry G. Fischer, of Fischer, Willis & Panzer, 1735 De Sales Street, N. W., Washington, D. C.	3
Stuart Hedden, Attorney-at-law, New Milford, Connecticut	14
J. C. Green, National Inventors Council, Department of Commerce	23
Ernest F. Henry, Attorney, Barnard & Henry, 923 - 20th Street, N. W., Washington, D. C.	27
Wilton Lloyd, 400 Tilden Hall, 3945 Connecticut Avenue, N. W., Washington, D. C.	42

Pages at which material is to be inserted:

42

DO NOT DESTROY O. M. UTIL. 2
RECORD COPY



Firshein
aj

H. R. 2068

- - -

Thursday, February 16, 1956

United States Senate,
Subcommittee on Patents, Trade-Marks and
Copyrights, of the Committee on the Judiciary,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10:45 o'clock
a.m., in Room 424, Senate Office Building, Senator Joseph C.
O'Mahoney (chairman of the subcommittee) presiding.

Present: Senator O'Mahoney (presiding).

Also present: George S. Green, of the Committee Staff.

- - -

Senator O'Mahoney. The committee will come to order.

Mr. Green, will you be good enough to make a preliminary
statement.

Mr. G. S. Green. Yes, sir.

This is the time, Mr. Chairman, set for the hearing on
H. R. 2068, which is for the relief of William F. Friedman.

(H. R. 2068 is as follows:)

Mr. G. S. Green. It is a bill which has passed the House and is now pending before the subcommittee of which you are chairman, and would pay to Mr. Friedman the sum of \$100,000 in full settlement of all rights in respect to his inventions in connection with military, naval and air communications facilities which are now or at any time have been placed in secrecy status by the War Department or the Department of Defense.

It would appear that Mr. Friedman has in the years past developed inventions of value to the United States from the defense standpoint, and due to their value from that position, they have been put under secrecy status, so there has been no way in which Mr. Friedman, as an individual, as such, could gain any recompense from the inventions that have been of benefit to the Government.

Senator O'Mahoney. What has been the report of the Department?

Mr. G. S. Green. The report of the Department of the Army in this case has been favorable, and it is contained in House Report No. 260 of this Congress, 1st Session.

The witnesses we have here today --

Senator O'Mahoney. When was that report written?

Mr. G. S. Green. In the 1st Session, sir, of this Congress.

Senator O'Mahoney. What delayed action on the bill in

the 1st Session?

Mr. G. S. Green. Usually the press of business is the main reason.

Senator O'Mahoney. When did it pass the House?

Mr. G. S. Green. It passed the House on -- it was referred to the Senate April 20, 1955.

Senator O'Mahoney. Is there any opposition to it on file?

Mr. G. S. Green. Yes, sir, there is opposition on file, and those witnesses have been notified.

One of the witnesses in opposition is Mr. Henry, a lawyer here in Washington, D. C., with the firm of Barnard & Henry.

Another opposition letter came in from Mr. Wildon Lloyd, of Washington, D. C., who is also an inventor.

Senator O'Mahoney. I see.

Mr. G. S. Green. There are three proponents to the legislation, and two objections.

Senator O'Mahoney. Very well, let us hear the proponents.

STATEMENT OF HENRY G. FISCHER,
OF FISCHER, WILLIS & PANZER, 1735 DE SALES
STREET, N. W., WASHINGTON, D. C.

Mr. G. S. Green. I believe Mr. Fischer will be the first witness.

Will you please state your name, sir?

Mr. Fischer. My name is Henry G. Fischer.

Mr. G. S. Green. What is your occupation?

Mr. Fischer. I am a lawyer in Washington, D. C.

Mr. G. S. Green. What connection do you have with this matter under discussion, sir?

Mr. Fischer. I have been and still am Mr. Friedman's attorney with respect to H. R. 2068, the bill which the committee is now presently considering, sir.

Mr. G. S. Green. How long have you been the attorney for Mr. Friedman?

Mr. Fischer. Since May of 1950.

Mr. G. S. Green. Is Mr. Friedman here today?

Mr. Fischer. No, he is not here today.

Mr. G. S. Green. Could you give us the reason why?

Mr. Fischer. He recently, or during the past year, has had two or three heart attacks; and being a coronary, we thought it would be advisable for him not to attend this hearing.

But if, Mr. Chairman, for any reason you would like him to be here, we could have him here within 10 or 15 minutes.

Senator O'Mahoney. We will see what the evidence is as we proceed.

Please proceed with your statement of the facts.

Mr. Fischer. The bill, Mr. Chairman, which your committee is now considering, has been in process in one form

or another since 1950.

The matter was first presented to the Department, the Department of Defense, in 1950; and after four years of investigation, the Department made its final report to the Judiciary Committee of the House in 1954. It reported in favor of the bill.

In addition to the Department of Defense --

Senator O'Mahoney. Did it report in favor of the sum?

Mr. Fischer. The sum and the bill, H. R. 2068 in its present form.

Senator O'Mahoney. Yes.

Mr. Fischer. In addition to that, the National Inventors Council has approved the bill. I understand Mr. John Green of the National Inventors Council is here to testify today.

A hearing was held by the Judiciary Committee in the House in the early days of the last session. It recommended in favor of the bill, and the House passed the bill sometime in the last session, as Mr. Green said.

Senator O'Mahoney. What is the nature of the inventions which we are talking about?

Mr. Fischer. I have no personal knowledge. They are all very highly classified. I can only say, in the cryptological field.

Senator O'Mahoney. The what?

Mr. Fischer. They are in the field of cryptology.

Senator O'Mahoney. Yes. How many inventions are there? You talk of them in the plural.

Mr. Fischer. Yes. There are at least nine, at least nine inventions, two of which never went to patent at all, because they were of such a highly confidential nature no patent applications were ever filed, and seven on which, in fact, patent applications were in fact filed, but then held in secrecy.

So, all-told, there are nine inventions specifically that I know about.

The bill would take care of those nine and any others that he may have had.

Senator O'Mahoney. Were any objections raised in the Patent Office against the seven?

Mr. Fischer. I don't think so. Two of them have gone to patent recently, two of the seven. The other five I don't think have been considered, presumably because they have been maintained in secrecy.

Senator O'Mahoney. Were they used by the Department of Defense?

Mr. Fischer. I understand that all but one, certainly, were used. There is a question as to one.

Senator O'Mahoney. Did Mr. Friedman have any participation in the use of them?

Mr. Fischer. Under the policies of the Government, and the law at the time he made the inventions, Mr. Friedman was given the commercial and foreign rights in his inventions. I don't know whether that answers your question or not.

Senator O'Mahoney. No. I was asking whether he was employed by the Department of Defense to use his invention.

Mr. Fischer. I can't answer that. I don't know. He was not employed for the purpose of inventing these specific inventions.

Senator O'Mahoney. Was he employed at all by the Department of Defense?

Mr. Fischer. Yes, he has been in the employ of the Government as a civilian since 1921.

Senator O'Mahoney. In what capacity?

Mr. Fischer. His work all the time, sir, has been of a classified nature, but in the cryptological field, in cryptanalysis and in cryptography.

Senator O'Mahoney. Is he a recognized cryptologist?

Mr. Fischer. As I understand it, sir, he is one of the world's foremost cryptologists.

Senator O'Mahoney. Is there any doubt about that?

Mr. Fischer. I don't think there is any doubt about it. The only glimpse I have had of the nature of his work, I read in the Pearl Harbor investigation, Mr. Chairman. There it is disclosed that it was he who led the team that broke the

Japanese Purple Code, a feat which had --

Senator O'Mahoney. The facts, then, as you present them to the committee, are, briefly, that Mr. Friedman invented cryptological formulae which were used by the Department of Defense, and which were of such value that they were classified as secret.

Mr. Fischer. That is right.

Senator O'Mahoney. That only two of them went to patent, although applications for patent were made for --

Mr. Fischer. Seven.

Senator O'Mahoney. -- seven. And two others were presented to the Department of Defense for which no patent application was ever filed.

Mr. Fischer. That is right.

Senator O'Mahoney. And that Mr. Friedman was never compensated by the Department of Defense for the use of these inventions.

Mr. Fischer. That is right.

Senator O'Mahoney. That is right.

And the Department of Defense has approved a settlement with him for the sum mentioned in the bill.

Mr. Fischer. That is right. But not --

Senator O'Mahoney. Does that summarize it?

Mr. Fischer. That summarizes it. I would just like to add one thing, if I may, Mr. Chairman: The purpose of the

bill is to compensate Mr. Friedman because of the fact that he has never been allowed to exploit commercially the rights which he himself has in this patent the way other Government inventors could who invented things that were not so important, and, therefore, were never brought in under secrecy. So that the nature of the bill would be to compensate Mr. Friedman for the losses which he suffered because he was unable to exploit the commercial rights in his inventions, because of the very importance of those inventions to the United States Government.

Now, the bill calls for a payment, in effect a purchase of his rights by the Government for the sum of \$100,000.

As to the relationship of that amount to the value of his rights and the potential losses that were involved, I have no knowledge, because it is all based on classified information. But in the report of the Secretary of the Army, the final report, there is a statement to the effect that classified information in the hands of the Department of Defense indicates that his potential loss, due to the fact that he has been unable to exploit his commercial rights, exceeds considerably the amount of this bill.

Senator O'Mahoney. Well, these inventions are still secret, are they?

Mr. Fischer. All but two of them, yes, sir. All but two are still secret, and from the information I have, there

is very little prospect that they will ever be anything but secret.

Senator O'Mahoney. Well, what about these two?

Mr. Fischer. Those two have gone to patent. They are no longer secret.

Senator O'Mahoney. And they are public?

Mr. Fischer. They are now public.

Senator O'Mahoney. And Mr. Friedman has never made any effort to exploit the value of this in any other market?

Mr. Fischer. No, he has not. He has not. Not as to those two; and, of course, as to the rest of them he cannot. And during the period that these two were in secrecy, which was a period of about 12-14 years, he was unable to do so as to them.

Senator O'Mahoney. If I seem to be hurrying you, Mr. Fischer, I am sure you will pardon me.

Mr. Fischer. Not at all, sir.

Senator O'Mahoney. Because the Senate goes into session at noon, and we have some very important matters coming up relating to the functioning of the committees of Congress. So that unless there is something more you want to add, I am going to call the next witness, or something more that Mr. Green wants to ask.

Mr. G. S. Green. May I just ask about two questions.

Senator O'Mahoney. Do.

Mr. G. S. Green. Mr. Fischer, under what circumstances did the Government get his rights to these patents? Was it by assignment or seizure?

Mr. Fischer. Some of them, you will notice there is a list of them -- some of them they took assignments and allowed Mr. Friedman to retain the commercial and foreign rights. In other cases they merely took a license.

Mr. G. S. Green. That was done by assignment?

Mr. Fischer. The license was done, presumably, by some written documents. I have not had access to them.

Mr. G. S. Green. Have you searched the possibility of a court action for compensation in this matter on the part of Mr. Friedman?

Mr. Fischer. Yes, it has been searched very carefully. So far as we can determine, there is no legal relief to which Mr. Friedman --

Mr. G. S. Green. You know no law under which he could have received compensation by the institution of a suit?

Mr. Fischer. I know none, and I think the report of the Secretary of the Army makes the specific statement there is no legal relief by any other method by Mr. Friedman.

Mr. G. S. Green. One other thing. I note on page 6 of the House report are a number of patent applications, applications for patents, set out, and the inventor is Mr. Friedman. I notice in two of them, however, Friedman and

Rowlett.

Who is he?

Mr. Fischer. Mr. Rowlett was a co-inventor, a co-inventor with respect to two involved.

Mr. G. S. Green. What is Mr. Rowlett's position in this legislation? How would he be affected by that?

Mr. Fischer. I don't know that he would be affected by that. As I understand it, Mr. Friedman discussed the matter with Mr. Rowlett at the time the matter was presented to the Department of Defense, and suggested that Mr. Rowlett join with him if he possibly wished to do so; and I understand Mr. Rowlett indicated no desire at the time to present any matter on his own behalf.

I don't know what his position would be, and I don't know what the nature of his claim would be, if he had one.

Mr. G. S. Green. But he is a co-inventor with respect to two of the --

Mr. Fischer. With respect to two of the nine patents, he was a co-inventor, yes, sir.

Mr. G. S. Green. That is all.

Senator O'Mahoney. These two -- in which classification do they belong? Were they used?

Mr. Fischer. They were both used, they were both used by the Government, yes, sir.

Senator O'Mahoney. All right.

Who is the next witness? I am not shutting you off, you know.

Mr. Fischer. No, sir. I understand your situation.

STATEMENT OF STUART HEDDEN,
ATTORNEY-AT-LAW, NEW MILFORD,
CONNECTICUT

Mr. G. S. Green. Mr. Hedden, of Connecticut.

What is your occupation, Mr. Hedden?

Mr. Hedden. I am an attorney.

Mr. G. S. Green. What connection with this legislation do you have, sir?

Mr. Hedden. None whatsoever. I and my family have been personal friends of Mr. Friedman and his family for approximately 20 years, probably a little longer than that.

Knowing of this pending legislation because of that friendship, and feeling that perhaps I am unique in the United States in having some knowledge of the value abroad, in foreign countries, of patents in this field, I thought, Senator, my testimony might be of some help with respect to the amount of this bill.

The background from which I testify is my understanding that you are not interested in any sense here in the value to the United States of Mr. Friedman's inventions. He has never made any claim of any kind for any compensation for the use by our Government of those inventions. Those freely belong to the Government.

But, as I understand it, the law was that he was entitled to the use commercially for civilian purposes in the United

States, and abroad for military or civilian purposes, of his inventions.

Now, it happens that a client of mine of many years' standing, some 17 or 18 years' standing, is one of the foremost foreign inventors in the world in this field, a Mr. Boris Hagelin, a Swede, H-a-g-e-l-i-n. Mr. Hagelin is a Swedish citizen, and is engaged, and has been for all of his adult life, in the business of manufacturing and developing and inventing cryptological devices and selling them to governments.

Mr. Hagelin has had associates in his manufacturing business, so that he received a royalty personally as a distinct thing from any manufacturing profit that he may receive as a shareholder in manufacturing companies in which he has an interest, which do this manufacturing.

He also, in some countries, has licensed his entire inventions to concerns in which he has no proprietary interest whatsoever, and has received in compensation solely an inventor's royalty.

I know what those royalties have been, in my professional capacity; and because of my friendship for Mr. Friedman, I have asked Mr. Hagelin's permission to appear before you and to give some indication of the scope involved in these royalties. He has granted me permission to testify as I am about to testify, and has agreed that there will be no

violation of my attorney-client relationship in so doing.

It happens that in substantially all the countries in the world, there is a market for cryptological devices, whether or not made by nationals of those countries. Now, that is not true, to the best of my knowledge, in only two countries. England, to the best of my knowledge, will not purchase such machine except from its own nationals; and, to the best of my knowledge, Germany has not done so.

But France has, Italy has, all the countries in the Near East have, and I mean the countries on our side of the curtain, because I am proud to say that my client, Mr. Hagelin, has consistently refused to sell any of his equipment on the other side of the curtain, although he was besought to do so.

All the countries in the Near East, all the countries in Africa, all the Scandinavian countries -- all the countries, the Netherlands, France, Spain, all of those countries, have at one time or another, to my knowledge, purchased cryptological equipment from other than their own nationals, and have licensed it other than from their own nationals.

In that sense, I think they constitute a market for any marketable devices that Mr. Friedman may have developed and invented in this field.

Mr. Hagelin's royalties in this field have averaged, since the war, approximately \$50,000 a year. In no year have they been less than \$25,000 a year. I take the period

since the war, because that has been a low period in this business. The big activity was in the years when the world was preparing, immediately before the war, in the years when America was doing less supplying of defense equipment to other nations, and, of course, in the early war years, when his royalties were huge and ran into the millions.

But in the years since the war, his royalties have, from one country or another, in this field, averaged close to \$50,000 a year.

I have also at one time, although I do not now, represented in a semi-professional capacity another man engaged in this business, a Swiss. I do not know the figures representing that man's income from his cryptological developments. I do know that he has told me they were the substantial background of a business which -- in the plant of which I have been -- which occupied two big floors and was a substantial business.

I do know that my client has been offered by an Italian inventor, a colonel in the Italian staff, in this field, a machine called 'the OMI for a flat price of a million dollars, which he refused to consider. This was a single invention machine. And that the inventor would not talk to him on another basis, and he proceeded no further with it.

He has informed me that one of his associates, a Dr. Hell, a German, who is a recognized inventor in this field,

has licensed for civilian use a telewriter which was the direct result of his work in the field of cryptology, has licensed that to Seemans and Hoskins, a leading German manufacturer, bearing a relation in Germany that, say, GE and Westinghouse have here; and that Dr. Heil has been paid in royalties by Seemans and Hoskins over a quarter of a million dollars, over a million gold marks, on that one invention which he licensed.

Senator O'Mahoney. I would like to secure from you some idea of the extent of this industry.

A few moments ago, in speaking of one of these inventors, the man who refused a million dollar offer --

Mr. Hedden. Yes, sir.

Senator O'Mahoney. -- you spoke of having had some contact with it in a plant, two floors of which were occupied --

Mr. Hedden. Yes, sir.

Senator O'Mahoney. -- I assume, by machines of this kind. Is that right?

Mr. Hedden. By machines making equipment, yes, sir.

Senator O'Mahoney. Making what sort of equipment?

Mr. Hedden. Well, in this case, largely telewriter equipment. This manufacturer was engaged in two fields: in lamps, in which he was an expert, which have nothing to do with this field; and in cryptological devices to go on a

line between a teletypewriter and the other end of the circuit.

Senator O'Mahoney. I have assumed all along that these inventions of Mr. Friedman were mechanical inventions. Am I right?

Mr. Fischer. I presume so, too, but I don't know, Mr. Chairman.

Senator O'Mahoney. Do you know, sir?

Mr. Hedden. No, sir. I understand it is extremely classified information. My assumption, from my knowledge of the field -- and this is a rare, distant, outside guess -- but knowing what is done in outside places, my assumption is that they would be both mechanical and electronic.

Senator O'Mahoney. Well, we would call that an educated guess.

Mr. Hedden. I think it is.

Senator O'Mahoney. Very well, sir. You may proceed, if there is anything more you wish to add.

Mr. Hedden. The only thing I have to add is that the normal royalty in this field, based on my knowledge of the royalties my own client has received -- and, as I have pointed out, some of them have come from companies in which he had no interest whatsoever, companies that were national in France, for example -- and upon my knowledge of what the Swiss inventor received, and other knowledge, the normal

royalty in this field is not like our manufacturing royalty in America, where there is a big volume of equipment. This is limited-volume, very high-priced equipment. The royalty is 10 per cent, normally, in this field.

The royalty which Dr. Hall got from Seemans and Hastings was a 10 per cent royalty while his patents lived, and a 5 per cent royalty as long as they manufactured after his patents expired, and that is normal in this field.

Senator O'Mahoney. Is the \$100,000 sum offered in this bill as compensation, an excessive amount?

Mr. Hedden. In my -- from my knowledge of this field and the market abroad, I think it is a shockingly modest amount, Senator. I think that it would be a very simple matter to obtain annual royalties that big on inventions, which I know nothing about, because they are secret, but which our Government thinks highly enough of to keep as secret as they have kept them.

I would love the chance to exploit those royalties on that basis.

Senator O'Mahoney. Did you testify, in response to Mr. Green's questions, as to your residence?

Mr. Hedden. My residence is in New Milford, Connecticut; and I would like to add -- I have said I am a counsel; I am not associated in any way as counsel with Mr. Fischer, whom I never saw until this morning, or with Mr. Friedman, nor

have I ever represented Mr. Friedman professionally in any capacity whatsoever. My relationship is that of a personal friend.

Senator O'Mahoney. I understood you to say you have no personal interest in this bill?

Mr. Hedden. No, sir, except to see what I think is a fundamental justice done.

Senator O'Mahoney. You are a citizen of Connecticut?

Mr. Hedden. Of Connecticut.

Senator O'Mahoney. A native-born citizen?

Mr. Hedden. Of Connecticut, and a very loyal American.

Mr. G. S. Green. You are acquainted with Mr. Friedman, however.

Mr. Hedden. Yes, sir, and have been for 20-odd years.

Mr. G. S. Green. Just one question. Speaking of these inventor clients of yours, is it your opinion, as an inventor, that Mr. Friedman is of the same stature in his field?

Mr. Hedden. My client has told me, since I first knew him -- and I had the privilege of introducing him at one time to Mr. Friedman -- has told me that Mr. Friedman in this general field -- now, he is speaking not only as an inventor but as a cryptanalyst -- is recognized by the few people in the world who know about these things, as being one of the two or three outstanding men in the world, and probably the outstanding man.

My client at one time was an officer in his own government in this field, and in that capacity would have some knowledge of who the outstanding men are in other countries with whom they were associated.

Senator O'Mahoney. Any other questions?

Mr. G. S. Green. I think that is all, Senator.

Senator O'Mahoney. Mr. Hedden, we are very much obliged to you for your statement, sir.

Mr. Hedden. Thank you very much, Mr. Chairman.

May I be excused?

Senator O'Mahoney. Thank you; yes, sir.

STATEMENT OF J. C. GREEN,
NATIONAL INVENTORS COUNCIL,
DEPARTMENT OF COMMERCE

Mr. G. S. Green. Mr. J. C. Green. You are connected with the National Inventors Council of the Department of Commerce?

Mr. J. C. Green. That is right.

Mr. G. S. Green. How long have you occupied that position, Mr. Green?

Mr. J. C. Green. Since about 1940.

Mr. G. S. Green. And that is a Government organization?

Mr. J. C. Green. That is a governmental staff which supports an advisory group of outstanding scientists, industrialists, who are concerned with inventions for national defense. We have such men on the Council as Dr. Charles Kettering, of General Motors Corporation; Mr. James Zeder, of the Chrysler Corporation; Dr. Roger Adams, of the American Chemical Society; Dr. Oliver Buckley, Chairman of the Board, Bell Labs; George Coddington, General Dynamics -- seventeen men of that caliber, who act as, you might say, expert advisers to the Federal Government on integrating inventions, civilian inventions, in to our national defense picture.

Mr. G. S. Green. Just exactly what is your position?

Mr. J. C. Green. I am in charge of the staff which supports this advisory council, and we are concerned with all

these inventive ideas that come in to Washington, to see that they are appropriately sympathetically evaluated. And we are always interested to see that inventors are properly treated, not because of the individual inventor, but because we believe that if inventors are properly treated, there will be more inventions made, and, therefore, there will be a greater asset to our national defense as a result.

Mr. G. S. Green. Are you acquainted generally with the facts in the Friedman case which is under discussion at the present time?

Mr. J. C. Green. Only generally, because, for the same reason as has been mentioned before, we have had great difficulty in getting specific knowledge. This is a very highly classified invention, group of inventions.

Mr. G. S. Green. What else can you tell us about it, in relation to the merits or demerits of this bill, if you will.

Mr. J. C. Green. Well, the prior bill, I believe the number was S. 2283, was -- we were asked to comment upon it by Senator McCarran, and the Council took it up at a meeting in 1952, and we felt at that time that it was very hard for us to specifically comment on the amount, because we could not really get any facts during our investigation.

I would like to read from the minutes of that meeting, just very briefly:

"Next, H. R. 5728, corresponding bill S. 2283, is represented. This is a bill for the relief of one William F. Friedman, which is currently before the Congress, and Senator McCarran felt that he would like to have the Council's opinion on the legislation. Council felt it was difficult to make a specific recommendation on a bill for relief of this type in the absence of a thorough and independent investigation of the facts. In general they agreed that incentives to inventions should be supported. When, as here, an inventor had been given the commercial rights to an invention as an incentive, and the rules of secrecy made it impossible for him to enjoy these rights, an equitable remedy seemed sound.

"After discussion, the Council directed the secretary to inform Senator McCarran along these lines."

These were done in a letter, I am sure you have in the record, of February 28, 1952, in which the Council indicated just along these lines.

So what I am really saying, in fact, is, while the Council did not feel in a position to analyze the case because we, like all the rest, were unable to get the facts, we did believe that where an inventor had been given the commercial rights as an incentive and where, because his invention was so important to national security he was forbidden to enjoy those rights, an equitable remedy seemed fair and sound.

Now, just this morning, after 10:00 o'clock, I checked with Colonel Westerman, of the Army Patents Section, to see if we could learn a little more about the status of these inventions, and they are still highly classified inventions and, as Mr. Fischer indicated, there seems little chance they will be released from security.

Mr. G. S. Green. Little chance they will be released in the foreseeable future?

Mr. J. C. Green. That is right.

Mr. G. S. Green. Is there anything further you would care to add?

Mr. J. C. Green. Nothing. But I would just like to stress that point: If this had been an unimportant invention, a routine invention, and he had been given the commercial rights and he could have gone out and exploited them, you would not have this bill before you. It is because of a very unique situation, and an invention so important to national defense that the man was not able to enjoy legal rights that had been given to him, property rights that had been given to him, which is the occasion for the bill here this morning.

Mr. G. S. Green. Do you have any questions, Mr. Chairman?

Senator O'Mahoney. No.

Mr. G. S. Green. I think that is all, Mr. Green.

Senator O'Mahoney. Thank you very much.

Mr. G. S. Green. I think the next witness is Mr. Henry.

Mr. Henry. Yes, sir.

STATEMENT OF ERNEST F. HENRY,

ATTORNEY, BARNARD & HENRY,

923 - 20TH STREET, N. W., WASHINGTON, D. C.

Mr. Henry. I have a statement prepared which may cover most of your questions, but if you wish to ask me questions --

Senator O'Mahoney. You may proceed with the statement, sir, bearing in mind the necessity of the chairman appearing on the floor of the Senate.

Mr. Henry. That is the reason I put it down on paper, so it would be brief, perhaps, and be comprehensive.

Mr. G. S. Green. Would you like to submit, Mr. Henry, your statement for the record, and then you can speak from it?

Mr. Henry. Yes, sir. I have given the reporter a copy.

My name is Ernest F. Henry. I am a lawyer with offices at 923 - 20th Street, N. W., in Washington, D. C., and in association with other counsel, including Mr. Roger E. Brooks of the same address, I represent the estate of Edward E. Hebern, deceased, and Hebern Code, Inc., claimants to certain compensation from the United States Government for its use of certain cryptographic patents and secret information paralleling, if not completely covering, the field in which the claim now before your committee is concerned.

My purpose in appearing before your committee this morning

is to present to the Congress some aspects of the matter which I trust will be in the interests of the United States and in the interests of the various parties who would have the Government make just compensation to those persons entitled and who, except for specific legislation, will not be fairly compensated for their inventive genius.

For the purposes of this presentation, I assume that Mr. William F. Friedman is a patriotic and loyal American, a gentleman and a scholar. I have no intention of belittling any of Mr. Friedman's contributions to the United States, and I am aware of the high regard in which he is held by various Government officials.

I have had occasion to read all of the public record available covering the various bills that have been introduced in the respective sessions of the 82nd, 83rd and 84th Congresses. I came across the claims of Mr. Friedman in my investigation of the possibility that the Congress might grant relief to my clients after exhaustion of all other remedies.

I was startled to discover that Mr. Friedman appears to be seeking relief for certain loss of commercial profits for Government use of inventive material and secret processes which Mr. Edward H. Hebern had previously and concurrently contributed. Because of the classified nature of the matter it is, of course, not possible to openly compare Mr. Friedman's

contributions with those of Mr. Hebern, but it would appear to be possible and advisable for the Congress, through your committee, to ascertain more fully the real situation.

Over a period of years, my associates and I have gathered considerable unclassified data on the fringes of this highly secret matter, and from that file I would like to suggest to your committee the names of persons who could throw considerable light upon the subject matter of your committee hearing. These names are as follows:

Frank B. Rowlett, 216 South Pershing Drive, Arlington, Virginia. I think he was the same person referred to as the co-patentee.

Abraham Sinkov, Route 2, McLean, Virginia.

Solomon Kullback, 125 Van Buren Street, N. W., Washington, D. C.

Admiral Joseph Redman.

Admiral John Redman.

Admiral Joseph Wenger.

Captain S. F. Safford.

Agnes M. Driscoll.

Also, the committee could aid its hearing processes materially by securing a transcript of the statement of the late Admiral S. C. Hooper, made September 8, 1952, at a conference held at the Pentagon Building.

Senator O'Mahoney. Where was it held in the Pentagon

Building?

Mr. Henry. In the Pentagon Building.

Senator O'Mahoney. But where?

Mr. Henry. The Senator is asking me something that I cannot answer. When I first get in the Pentagon Building, I am completely lost.

Senator O'Mahoney. I know you are in danger of never getting out. But I want to know before whom it was.

Mr. Henry. It was before a group of Defense officials.

Senator O'Mahoney. Who was the head? How can we identify --

Mr. Henry. Mr. Sargowitz, Captain Safford was there, and Admiral Hooper was there. They were the persons with whom we were in contact in connection with the Hebern --

Senator O'Mahoney. Was it an official conference?

Mr. Henry. Yes.

Senator O'Mahoney. Who was the official head of the conference?

Mr. Henry. May I ask my associate, Mr. Brooks.

Mr. Ernest Galliner, who is an attorney in the Department, the Patent Section.

Senator O'Mahoney. An attorney in the Patent Section?

Mr. Henry. Yes, sir. And the purpose of the conference was to discuss the Hebern claim, and possible relief, in this very same field. And Admiral Hooper, who has since died, did

make a statement at that time as to this general field.

Messrs. Rowlett, Sinkov and Kullbach have been fellow civilian employees of Mr. Friedman, and are in a position, I believe, to acquaint this committee with their contributions which may have become credited to Mr. Friedman.

The three listed admirals undoubtedly could furnish this committee with helpful comment on the contributions of the Navy to the store of knowledge which resulted in the so-called Friedman contributions.

Mrs. Driscoll has been the subject of a private act for relief in this same field as a civilian employee of the Government, and one who worked closely with Mr. Hebern, as well as with fellow employees of Mr. Friedman.

Senator O'Mahoney. You refer to this as a "private act."

Mr. Henry. Yes.

Senator O'Mahoney. Was it a law?

Mr. Henry. Yes.

Senator O'Mahoney. It has been enacted?

Mr. Henry. Yes, sir, and presumably she was paid.

Senator O'Mahoney. Do you know what the amount was?

Mr. Henry. Six-thousand-and-some-odd dollars, as half, or nearly half, which I will refer to --

Senator O'Mahoney. Can you identify the law?

Mr. Henry. Yes, sir. I have it here.

Mr. G. S. Green. What was the name again?

Mr. Henry. It is referred to in the report, the House report, and it is, in fact, I think, incorporated on the last page of the House report.

Mr. Fischer. It is incorporated in the Friedman report.

Senator O'Mahoney. Very well. Proceed.

Mr. Henry. Thank you, sir.

The Hebern claim, while hampered very substantially by the secrecy concerning the entire matter, nevertheless does reveal that Hebern was a pioneer antedating by many years any connection Mr. Friedman may have had with this cryptographic field; that the first Hebern patent issued August 12, 1913, and the last April 17, 1945; that Hebern had connection with more than a hundred inventions in patents in the cryptographic field; that his machines incorporating elements both patented and held from patent by reason of secrecy, were in use in the Department of Defense, and particularly in the Navy Department, during the entire period covered by Mr. Friedman's present claims, and we believe must have had considerable influence, if not decisive effect, upon the principles involved in the Friedman claims.

Inquiries directed to your committee at the staff level, and also at the staff level of the House committee, reveal that the Congress has no knowledge of the facts and valuable opinions of the persons I have just mentioned.

Senator O'Mahoney. Well, they must have had some

information about Mrs. Driscoll's opinions, having passed a law.

Mr. Henry. Not as to Mr. Friedman's contributions. That is what I have in mind.

Senator O'Mahoney. You included her in this list.

Mr. Henry. Yes, sir. That is what I am saying, sir, that Mrs. Driscoll's knowledge and opinions with respect to the relationship Mr. Friedman had is not a part of the knowledge, so far as I know, of the Congress. We are now speaking of the Friedman claim, sir. Of course, they had knowledge of the Driscoll contribution.

All I am saying is --

Senator O'Mahoney. You will note, Mr. Henry, that your sentence above was, "Mrs. Driscoll has been the subject of a private act for relief in this same field as a civilian employee of the Government, and one who worked closely with Mr. Hebern, as well as with fellow employees of Mr. Friedman."

Mr. Henry. Yes, sir.

Senator O'Mahoney. You do not want the committee, then, to understand that you were implying in that sentence that she had any information with respect to Mr. Friedman's patents?

Mr. Henry. I believe she does have, yes, sir. I did mean to infer that.

Senator O'Mahoney. Well, then, just a moment ago when

I first questioned you, you excluded her. Now, which are you, in or out?

Mr. Henry. No, I am trying to go between these two wide points. What I am trying to say, Senator, is that Mrs. Driscoll does know, I believe, of the field and perhaps, and probably, of Mr. Friedman's contributions as related to her own and to Hebern and to the other persons; but that in connection with the act for her relief it was not necessary to go into that relationship and, therefore, the Congress probably does not have that extended information.

That is the reason I included her, sir.

Senator O'Mahoney. All right, sir, proceed.

Mr. Henry. Thank you, sir.

Since we have no power to obtain the appearance of the persons who could furnish this data to your committee, I can merely suggest and request that you use your good offices in this connection. Until that is done and your committee has the benefit of the views of these informed persons, I respectfully request that action on H. R. 2068 be deferred.

After your committee has given full consideration to the information from the sources I have suggested, it may well be that the committee will have discovered that Mr. Friedman's contributions are worthy of the compensation suggested by the bill over and above the compensation which should likewise be awarded to other persons, including our clients, for

similar services or services of much greater magnitude.

I am confident that Mr. Hebern's contributions, as yet uncompensated, far surpass those of Mr. Friedman, and it may also be that some of Mr. Friedman's colleagues should be given similar awards.

In this connection I call the committee's attention to the fact that the award to Mrs. Driscoll in private act 267 of the 75th Congress was by way of amendment to the original bill for relief of the widow of Commander William F. Gresham, and this amendment reflected the data obtained at a similar hearing during the course of the passage of that act.

In any event, I trust this committee will have the record show that any award to Mr. Friedman will have no adverse effect upon the Hebern claims for just and equitable compensation.

Senator O'Mahoney. You do not want to be understood as denying the claim of Mr. Friedman?

Mr. Henry. No, sir.

Senator O'Mahoney. You do not challenge the validity of his inventions?

Mr. Henry. I suggest that there may be inventions to which others have contributed which now are credited to Mr. Friedman.

Senator O'Mahoney. Yes.

You do not challenge the fact that he did place his

inventions, whatever they were, at the disposal of the Federal Government?

Mr. Henry. As a matter of fact, I believe the records, the Government records, show that he, when he was employed, signed a contract to that effect, that he would do so.

Senator O'Mahoney. Yes.

You do not challenge, of course, the report of the Department of Defense to the Congress that the patents and these machines were worth to the Government the expenditure of \$100,000 as a reward to Mr. Friedman; you do not challenge that at all?

Mr. Henry. I don't challenge it as such, sir; I suggest to the committee that, as we all are hampered somewhat by secrecy, we cannot compare these things. I would say, as my personal opinion, sir, that \$100,000 would not go very far for any valuable invention in this field, and that the valuation of \$100,000 may be inadequate. But the --

Senator O'Mahoney. In other words, you think that Mr. Hebern perhaps ought to be awarded some compensation?

Mr. Henry. May I explain it this way: I did not intend to try to inject Mr. Hebern's claim here and supplant, necessarily, Mr. Friedman. But for purposes of the committee, and clarity of the record, perhaps I should say that we, unlike in the case of Mr. Friedman, Mr. Hebern was not a civilian employee of the United States Government. He worked

closely with the United States Government over a period of years, as any governmental records would show; and they did, in fact, buy some of his machines, put them to use, and they added thereto items of secret information which he contributed to the Government, and which were in use.

And we have been seeking, unsuccessfully, to obtain compensation from the Government for that use, as well as for the lack of facility for utilizing it commercially, as is here the case, and we have felt that we had to, because of our non-employee status, file a claim in the Court of Claims and get it denied, and then come to the Congress with our story. And we are not in that position as yet.

Senator O'Mahoney. As one lawyer to another, Mr. Henry, are you not in the position of asking this committee to use this Friedman bill as a device whereby you can make some progress with the claim of Mr. Hebern?

Mr. Henry. We just don't want to lose progress, that is really the point.

Senator O'Mahoney. But you want Mr. Friedman to lose progress?

Mr. Henry. No, sir. I don't want him to gain progress at the expense of Mr. Hebern. That is my position.

Senator O'Mahoney. Before the committee the evidence is now clear. First, the House of Representatives has passed this bill.

Mr. Henry. Without as exhaustive a hearing as you had here this morning.

Senator O'Mahoney. Well, it passed the bill.

Mr. Henry. Yes, sir.

Senator O'Mahoney. The Department of Defense approved the bill, and has advised Congress that \$100,000 is a suitable compensation, and they have no objection to the bill. Nobody challenges the value of machines of this kind.

Mr. Hedden has testified to the great value that is placed on some of these machines.

So there is no evidence against this claim, no challenge against this claim.

You are requesting the committee, however, to seek other information to support another claim, which is not now before us.

Mr. Henry. I am only trying to protect the interests of the Hebern situation from destruction.

Senator O'Mahoney. Do you think you can protect the interests of the Hebern situation by blocking the interests of the Friedman situation?

Mr. Henry. I am not sure that it is being blocked, sir.

Senator O'Mahoney. Or postponed.

Mr. Henry. Or only postponed. If the gentlemen were here, it would be a matter of just proceeding. But I don't have the right to call them here, as you know, sir.

Senator O'Mahoney. Of course, I know that.

Mr. Henry. And I am not sure that they would respond even to a request by the Senate, but it would appear from this that Mr. Friedman is being given credit for a wide latitude of ability and genius, and I am afraid that if, when the time is appropriate for us to come to this same committee on an equitable claim --

Senator O'Mahoney. Whatever credit he has for genius as contained in the bill, it would seem to be agreed by the experts that the compensation is not at all wide, on the record.

Mr. Henry. I am forced to that same conclusion.

Senator O'Mahoney. Yes, I see.

Is there anything else you wish to add, Mr. Henry?

Mr. Henry. Only that I still think the committee should utilize the facilities that may be at its hand to be sure that Mr. Friedman, and Mr. Friedman alone --

Senator O'Mahoney. Have you talked with the patent attorney down there, the head of the Patent Department in the Department of Defense?

Mr. Henry. You mean as to the Friedman claim?

Senator O'Mahoney. No, as to your own claim.

Mr. Henry. Oh, yes, many times.

Senator O'Mahoney. What did they do; brush you off?

Mr. Henry. For three years they inventoried the use of

our patents over a period of many years, and were, I think I am privileged to say, about to confer with us with regard to the amount of compensation, when they referred the matter just superficially to one of the manufacturers, who then said, "Well, maybe there are some others in the field, and so forth, that, with regard to the payment of royalty, we are concerned with," and the Department then said, "Well, we will not continue with this," even though they had taken many years of our statute of limitations. And we were forced to file a claim in the Court of Claims.

Now they are well aware of it, they seem to be sympathetic about it, but they say, "Your claim is not the kind that the Court of Claims may entertain." We are about to be dismissed out of there, because we can't get the evidence, which they all admit is there; and so, we are --

Senator O'Mahoney. Have they given you any written opinion with respect to your efforts to secure action by the Department of Defense?

Mr. Henry. We have considerable writings, if that is what you mean, that we will present in due course, on an equitable basis for relief for Mr. Hebern.

They, of course, technically, in the Court of Claims, are denying that any of their claims have --

Senator O'Mahoney. Since you assume that it will be dismissed, and I can see why, I think that your course of action

should be to use the material that you have to support a bill on behalf of your client, rather than to try to intervene in the case here. I do not think there is any intervention here.

Mr. Henry. Well, I have tried to carefully point out that I have not meant to belittle Mr. Friedman at all.

Senator O'Mahoney. Yes. You have been very frank about that, and the committee appreciates it, sir.

Mr. Henry. I just wanted to keep the record straight so that the avenue will be clear and we won't be blocked when we go to this point.

Senator O'Mahoney. As one lawyer to another, I applaud you for seeking to take advantage of every opportunity that is presented to you.

Mr. Henry. Thank you, sir.

Senator O'Mahoney. Is there any other witness?

Mr. G. S. Green. Mr. Wildon Lloyd.

STATEMENT OF WELDON LLOYD,
400 TILDEN HALL, 3945 CONNECTICUT
AVENUE, WASHINGTON, D. C.

Mr. Lloyd. I am a resident of the District of Columbia since 1902.

Senator O'Mahoney. Don't get into any argument, Mr. Lloyd. We understand you are not very well. Make a very brief statement, please. It is getting time for me to go to the floor.

Mr. Lloyd. You have to go to the floor. Do we have another hearing after this?

Senator O'Mahoney. No. We are going to close this as soon as we can.

We may talk to the Department of Defense about it.

Mr. Lloyd. I need about 15 minutes to present my points.

Senator O'Mahoney. Would it not be better for you to write that, sir, and file it with the committee?

Mr. Lloyd. All right.

Senator O'Mahoney. I do not want to take any chances with your health, sir.

(Mr. Lloyd's prepared statement is as follows:)

SUBCOMMITTEE INSERT

Senator O'Mahoney. Any other witnesses?

Mr. G. S. Green. That is all, Senator.

Is there any other witness in the room who desires to be heard? (No response)

Senator O'Mahoney. Mr. Fischer, do you wish to be heard further?

Mr. Fischer. In the light of certain testimony, I wonder if I might state for the record to this committee that upon Mr. Friedman's retirement, Mr. Friedman became the sixth American to be awarded the National Security Medal by the United States Government, and as I understand it, he is one of the two Americans who alone have been awarded both the Medal of Merit and the National Security Medal for work in this field.

Mr. G. S. Green. One question, Mr. Fischer, relative to the amount that is involved.

If I understand the law correctly -- not the law, but the fact has been stated that \$100,000 is a modest sum for the amount of work Mr. Friedman has done. Isn't it true that that sum, which passed the House, would be subject to income tax?

Mr. Fischer. Yes, it would be. It would be subject to income tax. As a matter of fact, the committee, apparently solicitous for Mr. Friedman's welfare beyond my own, directed me to have a meeting with the tax officials about the matter

and report back, and this will be subject to capital gains tax, \$25,000 will immediately go back to the United States Government -- \$26,000.

Mr. G. S. Green. Do you have any estimate of what he would actually get if the bill were passed for \$100,000?

Mr. Fischer. He would get \$100,000, less what he pays in attorney's fees, if he is permitted to pay attorney's fees, and of the remainder, he would give the United States roughly 25 per cent.

Senator O'Mahoney. Off the record.

(Off the record.)

Senator O'Mahoney. The committee will now adjourn.

Thank you all very much for your presentation.

end aj

(Whereupon, at 11:50 a.m., the subcommittee adjourned.)

- - -