

156

CORRESPONDENCE Oct. 1-10, 1952

N. WIENER · MC 22



[ca Oct., 1952]

HORACE S. FORD  
77 MASSACHUSETTS AVENUE  
CAMBRIDGE 39, MASSACHUSETTS

Subject: Massachusetts Republican Finance Committee Fund-Raising for  
National and State 1952 Republican Campaigns.

To Members of the Staff:

This is intended only for those who are interested in the success of the Republican Campaign and candidates (state and national) in the forthcoming election.

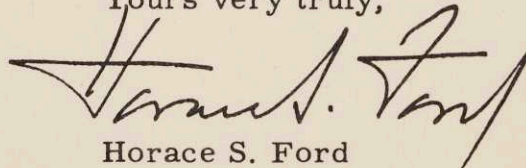
The officers of the Massachusetts Republican Finance Committee -- Charles C. Cabot, General Chairman, and Robert Cutler, General Vice Chairman -- are requesting institutions in this area to permit opportunity for such members of their staffs as are interested in the success of the Republican Party and candidates to contribute to the funds needed to carry on the Campaign.

Obviously the Institute and its Administration can neither solicit funds for this purpose officially or otherwise, nor can the Institute endorse or approve parties or candidates. Permission, however, has been granted to the undersigned to take on the assignment of seeing that all members who are interested have an opportunity of making such contributions as they wish. Similar permission from the Institute will be accorded solicitation in behalf of the Democratic Campaign.

Support for this Campaign must come from thousands of individuals. Corporations are not permitted by law to contribute. The case is well-stated in a Boston Herald editorial of September 19.

There is enclosed a subscription card and a return addressed envelope. You may use this if you wish, or forward subscription directly to the Massachusetts Republican Finance Committee, 8 Beacon Street, Boston, Mass. Your attention to the above will be heartily appreciated by

Yours very truly,



Horace S. Ford

P.S. The Institute is under no expense for this solicitation.

Enclosures - 3

[ans 10/15/52]

## ***Neighbor to Neighbor***

Beardsley Ruml is badly informed if he thinks the Democrats' appeal for \$5 contributions from grass roots supporters is something new and different. Republicans have been relying heavily on small contributors for years and are actively pushing a new drive now.

All of which reminds us that, if you haven't gotten in on the Bay State GOP's special "neighbor to neighbor" plan, this is definitely the time to do so. A lively state finance committee has organized all but 25 of Massachusetts' 351 cities and towns for solicitation purposes. But Republicans who are interested in a real victory this year should not wait for a volunteer to come to their door. They should volunteer themselves,

slip \$5 (or \$500 or 50c) in an envelope, and send it to the Republican Finance Committee, 8th floor, 8 Beacon Street, Boston 8, Mass., where it will be credited back to their local collectors.

Winning elections is a neighborhood matter even when the total vote runs into the tens of millions. And it is money collected at the grass roots and spent at the grass roots that enables the whole campaign machine to function smoothly.

Republican prospects are good in Massachusetts this year, as they are in the nation. But there will be no free ride to victory. We are confident that local Republicans, well in excess of the state committee's goal of 150,000, will dig into their pockets to the utter confusion of Mr. Ruml and his crowd.



- The **increase** in business tax per worker from 1941 to 1951 excluding unemployment compensation was:
 

U. S. ....	120%
Massachusetts .....	<b>430%</b>
- In the last three years, there were 44% more people on the state payroll to service only 2% more industrial jobs.
- Massachusetts' state debt has increased **22 times** in 7 years since Gov. Saltonstall. It is now **over Six Hundred Million Dollars.**

### THE RESULTS

Dever's bungling bureauracy has earned the reputation of **DRIVING BUSINESS AND JOBS OUT OF MASSACHUSETTS.**

### Pardon the Inconvenience

In 1950, Massachusetts paid \$11,313 per mile for upkeep of highways. New Jersey paid only \$4,663 per mile. All other states pay *less than one-half* of what New Jersey pays.

### Republican State Officials:

#### State Committee

Daniel Tyler, Jr. .... Chairman  
Mrs. Raymond W. Wheeler .... Vice Chairman

#### Finance Committee

Richard Preston .... Chairman  
Julia B. Kirlin .... Vice Chairman  
F. Burnham Chapman B/P H. Q. Chairman

### The Republican Candidates:

Dwight D. Eisenhower for President.  
Richard M. Nixon for Vice President.  
Sen. Henry Cabot Lodge, Jr. for Re-election.  
Christian A. Herter for Governor.  
Sumner G. Whittier for Lt. Governor.  
Beatrice H. Mullaney for Secretary of State.  
Roy C. Papalia for State Treasurer.  
David J. Mintz for State Auditor.  
George Fingold for Attorney General.

**GIVE AND WORK TO ACHIEVE  
A BETTER BUSINESS ATMOSPHERE  
IN MASSACHUSETTS**

**It takes change to make a dollar —  
It takes dollars to make a *change.***

**THE TIME TO CHANGE IS **NOW!****

# Prospectus

## THE Republican Party

OFFERS *You*

A CHANCE TO INVEST IN THE  
FUTURE OF

*Massachusetts*



A REPUBLICAN GOVERNMENT  
IN MASSACHUSETTS MEANS

*A Better Business Atmosphere,*

MORE JOBS, AND A

*Better Living for Us All*

MASSACHUSETTS REPUBLICAN FINANCE COMMITTEE

8th Floor, 8 Beacon Street, Boston 8

LAfayette 3-7535



# Buy Your Share - In The Future

HELP TO ACHIEVE A BETTER BUSINESS ATMOSPHERE IN MASSACHUSETTS and the NATION

## HERE IS YOUR ACTION PROGRAM:

1. Make your contribution to the Massachusetts Republican Finance Committee as soon as possible.
2. Get your friends to make their contributions NOW.
3. Volunteer to serve the Republican party in your town or precinct.
4. Vote to put Republicans in State and National offices.
5. Support the Republican objectives:—
  - a. To keep jobs in Massachusetts by keeping Industry in Massachusetts.
  - b. To restore public morality to the government of the Commonwealth.
  - c. To meet the social needs of the times in the REPUBLICAN WAY through private channels and initiative as opposed to state-managed funds and unlimited bureaucratic and political control and waste.
  - d. To make state government projects produce income on a self-paying basis whenever possible.
  - e. To be guided by the welfare of the citizens of Massachusetts in our attitude toward all legislation.

## WHAT MAKES MASSACHUSETTS RUN?

Your government, like your business or your household runs on money. Where does that government money come from?

**Natural Resources?** WE HAVE NONE.  
**Agriculture?** NO LONGER DOES MASSACHUSETTS RELY ON AGRICULTURE FOR ITS INCOME. Only ONE PERCENT of Massachusetts income comes from agriculture, forestry or fisheries.  
Therefore what really makes Massachusetts run is — MONEY FROM **BUSINESS.**

## WHAT DETERMINES HOW MUCH MONEY THE STATE AND ITS CITIZENS MAY USE?

40% of the Bay State's business is manufacturing.

Most of the remaining 60% services manufacturing.

The net result is that 8 out of 10 jobs in Massachusetts depend on industry.

Therefore what Massachusetts really depends on for jobs and money is —

BUSINESS AND INDUSTRY

## SO, WHAT'S THE PICTURE?

Blanchard's suppressed report said:

*"There is a widespread belief that the attitude of the legislative and executive branches of the State Government in Massachusetts towards industries show a lack of understanding, interest, and support. In many cases it is felt that even hostility to industry exists. Whether justified or not, the fact that this belief is held by so many of those whose decisions determine whether their companies are to stay in Massachusetts and expand there or go elsewhere is of profound importance to the future of the Commonwealth."*

What effect does this have on Massachusetts as a whole?

## FACTS, FACTS, FACTS

- From 1900 to 1951:

Increase in population in U. S. ....	103%
Increase in wage earners in U. S. ....	180%
Increase in population in Massachusetts	70%
Increase in wage earners in Mass. only	<b>34%</b>
- From 1929 to 1951:

Increase in income payments to individuals:	
In the 5 <b>other</b> New England states ....	191%
In Massachusetts .....	only <b>125%</b>
- From 1923 to 1950:

The change in number of production workers:

In the 5 <b>other</b> New England states:	
increase .....	+ 7%
In Massachusetts: decrease .....	- <b>18%</b>
- Corporation taxes in Massachusetts supply a larger percentage of state revenue than in **any other of the 48 states.**

National average .....	7.9%
Massachusetts .....	<b>26.9%</b>



Air Mail - 66.20  
+ .15 tax

jit - 1 class = 59.41  
+ 15% tax

netto - 19.30

Chapetz

3 hrs.

To: Professor Wiener

From: Dr. Means

Persons for the gentleman to see:

MIT - Health Department

~~Dr. Dana L. Farnsworth~~

~~Dr. Herbert I. Harris~~

~~Wed.~~  
100 Thurs.

~~Dr. J. H. Means - will call~~

~~Dr. Robert L. Nelson~~

Massachusetts General Hospital

ka 3-8200

~~Dr. Stanley Cobb - will call back~~

~~Dr. Ray Adams - maybe Fri. am.~~

~~Dr. Henry Brewster - will call Fri. am.~~

Boston Psychopathic Hospital

Lo 6-4900

~~Dr. Harry Solomon~~

Dr. Elvin Semrad - handles all appls.

Massachusetts Memorial Hospital

ka 9200 RO 7-3540

Dr. William Malamud - maybe Wed. pm? will call back  
500.

Beth Israel Hospital Be 2-4400

Dr. Grete Bibring (Mrs. Houston)

Wed. - Nov. 12

Thurs. - Nov. 13  
9<sup>15</sup> - Harv. Med. - 2-2, 10<sup>15</sup> - 4<sup>15</sup> Harv. Med.

Fri. - Nov. 14

MIT  
11<sup>30</sup> - Dr. Means  
1<sup>00</sup> - Harris, Nelson

~~9<sup>15</sup> Adams~~  
11<sup>30</sup> - Dr. Solomon  
(call that one)

2<sup>00</sup> - Dr. Cobb  
Dr. B's secretary  
will call re appt.  
Thurs. Fri.

all appls. cleared  
thru - Pancho

10<sup>15</sup> Dr. Henry Brewster  
Faculty of Hum. Inc.  
8584

Not included -  
any Th. or Fri.



[see Oct. 1952]

Monday, October 6:

The Owl, leaves Boston 12:30 a.m., arrives NYC  
at 6:15 a.m. (You can remain aboard until  
7:30 a.m.)

Dr. Ted Shedlovsky  
Rockefeller Inst. for Medical Research  
York Ave. and 66th St.  
REgent 4-800.

Mr. Henry Simon  
630 Fifth Ave.           -- luncheon at 12:30 --  
CIRCLE 5-6400.

The King's Crown Hotel  
420 West 116th St.           Telephone hotel to  
UNiversity 4-2700.           confirm reservation.

Tuesday, October 7:

Hotel reservation at Hotel Barclay, So. Rittenhouse  
Square.

Dr. Henry L. Bockus  
Dept. of Internal Medicine, Coll. of Physicians  
250 South 18th St.

Dr. Bockus will call for you at 6:15 to take you  
to the 6:30 dinner. The dinner is a black  
tie affair.



Cuff mail →  
Tickets - Friday noon

~~431~~  
~~431~~

Mon., Oct. 6.

~~12:30 a.m., The Owl to New York (Roomette \_\_\_\_\_) arriving~~

The Owl to New York (Roomette \_\_\_\_\_)  
Leaves South Station, 12:30 a.m.  
Arrives N.Y.C. 6:15 a.m. Can remain aboard until 7:30.

Dr. Ted Shedlovsky  
Rockefeller Institute for Medical Research  
York Avenue and 66th Street  
REgent 4-800.

Mrs. Teromulty  
3337 3347

Mr. Henry Simon  
630 Fifth Avenue. 12:30 luncheon  
CIRCLE 5-6400.

Cash. 65

The King's Crown Hotel - address -  
→ ??? 420 W. 116<sup>th</sup> St.  
W. Union

W. Union money order.  
- deposit required.

Tues., Oct. 7.

Hotel reservation at Hotel Barclay, So. Rittenhouse Square.

Dr. Henry L. Bockus  
Dept. of Internal Medicine, CON. of Physicians  
250 South 18th. St.

Dr. Bockus will call for you at 6:15 to take you to the  
6:30 dinner (black tie).

Expenses:	train fare to NYC --	11.90	- fare
		6.44	- robe
		2.00	- W.T. fee
	N.Y. to Philly	3.06	- fare
		.46	- tax
		<hr/>	
		23.86	

To be billed  
by Union Travel

Hotel deposit 5.00 (cash)  
(by check)

2779  
431



EXTRA. . . *Incorporated*

Ridgewood 6-6549—6-4057-J

517 SHERWOOD ROAD  
HO-HO-KUS, NEW JERSEY

October 1, 1952

Dr. Norbert Wiener  
Professor of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Dr. Wiener:

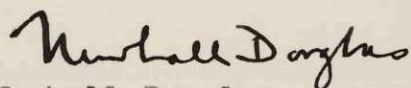
You may remember that I have recently written you about my trainers used for aerial gunnery training in the last war and about the installations for television I am now building following the same general principles.

Your work, particularly your writings, have had such a profound influence in this that we have been calling our most complex installation a "Cybermotion" system. I hope that this word, springing from the title of your book "Cybernetics" has your blessing.

We would consider it an honor for you to see the models we have in operation. If you are ever in this vicinity we would be glad to set them up for you.

If there are any further works in the field of Cybernetics that could be read and understood by a Yale man, I would be most grateful if you could suggest them to me.

Sincerely yours,

  
Newhall Douglas

nd/cw

cc sent to: Nilo 16, Apartment 2  
Mexico, D. F., Mexico



CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

# WESTERN UNION

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=Int'l Letter Telegram

VLT=Int'l Victory Ltr.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

BA646

B NVB433 NL PD=NEW HAVEN CONN 1=

1952 OCT 1 PM 10 14

PROF NORBET WIENER=

DEPT OF MATHEMATICS MASS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE MASS=

SHALL BE AT TECH FRIDAY AT ELEVEN=

GEORGE DUBE=



# SCIENTIFIC AMERICAN

2 WEST 45TH STREET · NEW YORK 36, N. Y. · MURRAY HILL 7-1200

October 1, 1952

Dear Dr. Wiener:

I regret that it has taken me so long to answer your letter of September 18, which arrived while I was on vacation. I appreciate that you have taken the trouble to set down your position in the matter of the article for our September issue.

We are of course very much disturbed that you should hold these opinions. We should like very much to give you a complete account that might cast a somewhat different light on the matter. Unfortunately, however, Gerard Piel, who is very much involved in the proceeding, is away for two weeks. As a result this letter is primarily an acknowledgement of yours, and should in no way be construed to close the matter from our point of view. You may expect to hear from us again.

Meantime, however, I should like to make two observations. One is that, if anyone is guilty of inconsiderate behavior in the matter, it is we and not Giorgio de Santillana. Moreover, I should like to state very positively that Dr. de Santillana was not paid a commission to obtain the article from you, as is suggested by your letter. We can see no reason whatever for holding Dr. de Santillana responsible for what has happened.

The other point I wish to make has to do with a remark that you made during our telephone conversation of last month. You said that your books were not even mentioned in our bibliography of the September issue. They were most assuredly mentioned. You will find "The Human Use of Human Beings," and "Cybernetics" are the first two entries in the bibliography beginning on page 192 of that issue.

Cordially,

*Dennis Flanagan*

Dennis Flanagan  
Editor

DF:ap

Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts



COPY

October 1, 1952

Dr. Henry L. Bockus  
Department of Internal Medicine  
250 South 18th Street  
Philadelphia 3, Pennsylvania

Dear Dr. Bockus:

I am starting to Philadelphia on Monday, October 6, but I shall stop over in New York for a luncheon with my publisher. I plan to arrive in Philadelphia on Tuesday afternoon, October 7, and I shall go directly to the Hotel Barclay. I have the manuscript of my lecture finished now, and I shall have your copy with me when I arrive.

I shall call you Tuesday afternoon. My wife will be with me.

Sincerely yours,

Norbert Wiener

hb

[ans 10/31/52]



# COPY

October 1, 1952

Dr. Moritz Chafetz  
Public Health Service  
United States Coast Guard  
Cape May, New Jersey

Dear Moritz:

I am glad that you can be in Philadelphia on Tuesday evening, October 7th. I plan to arrive there that afternoon, and a reservation has been made for me at the Hotel Barclay, So. Rittenhouse Square. Call me there when you get to the city, and if you can't reach me, get in touch with Dr. H.L. Bockus, 250 South 18th St.

There's a dinner I've asked them to invite you to Tuesday evening, at 6:30 at the Hall of The College of Physicians. This is a black tie affair.

Margaret and I are looking forward to seeing you.

Sincerely yours,

Norbert Wiener

hb







COPY

October 1, 1952

Dr. Theodore Shedlovsky  
Rockefeller Institute for Medical Research  
York Avenue and 66th St.  
New York, New York.

Dear Dr. Shedlovsky:

Professor Wiener has asked me to tell you that he is going to be in New York on Monday, October 6, for a luncheon engagement with his publisher. He will spend the night in the city before going on to Philadelphia for a lecture at the College of Physicians on Tuesday evening.

He hopes to see you either Monday morning or afternoon, and will call you when he arrives in New York early that morning.

Sincerely yours,

Mrs. George Baldwin  
Secretary to Prof. Wiener

h



COPY

October 1, 1952  
Septe

Mr. Henry Simon  
Simon and Schuster, Inc.  
630 Fifth Avenue  
New York 20, New York

Dear Mr. Simon:

This letter is to confirm your conversation this morning with Professor Wiener. Professor Wiener will be in New York on Monday, October 6, and will be at your office in time for a 12:30 luncheon engagement.

Sincerely yours,

Mrs. George Baldwin  
Secretary to Prof. Wiener

h



**J N A HAWKINS**

2 October 1952  
1520 N. Santa Anita ave.  
Arcadia, Calif.

Dr. Norbett Wiener  
Mathematics Dept.  
Mass. Institute of Technology  
Cambridge, Mass.

Dear Dr. Wiener;

Dr. Vearn Knudsen of UCLA introduced us following a lecture you gave at Westwood Campus about 3 years ago.

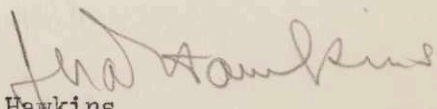
Knowing something of your interest in human Servo phenomena I enclose a rough description of one example of "Hunting" that I am currently encountering. This may turn out to be a common form of tremor, in which case file it or forget it.

If any further information is required I could have my Ophthalmologist try to examine my left retina while the oscillation is present. This would take a little doing as I don't know how long the eye must be dark adapted before the oscillation will start.

There may be a Thesis idea in the electromechanical voltage regulator called the "Regohm" and made near New York City. It is a relay structure with ten finger contacts closing in succession used to maintain constant voltage, current or frequency. There is something wrong with the available math on the subject although the device is not particularly new. We have done a lot of work trying to make theory and practice agree in this device with rather poor success. There are some subtle difficulties involving aspects of infinite gain, regulation slope and the tendency to operate as a monostable multivibrator. I think a more elegant mathematical approach is necessary than either the manufacturer or us have found. One of your students might like to undertake the analysis. The justification for this problem lies in the new requirements for high precision tube filament regulation in modern military electronic systems working from power mains sources that sometimes can vary from 50 to 800 cycles, during test or flight. Variable frequency filament regulators are not common. This Regohm device seems to resemble a magnetically controlled triode vacuum tube with ten finite steps of plate resistance variation, but analysis on this basis leads to difficulties.

More power to Cybernetics.

Sincerely

  
JNA Hawkins

[enc 10/20/52]



J N A HAWKINS

2 October 1952

2 AM

NOTES ON AN OSCILLATION PHENOMENON IN THE LEFT EYE.

I have had about 10 Iritis attacks in my left eye over the past 15 years, the last starting about three weeks ago. This acute attack was stopped rather quickly by Atropine and Cortone eye drops which were discontinued a week ago. In the last week I have noticed about 5 periods of an a.c. variation in image intensity in the left eye. These periods always follow periods of sleep or walking outside at night as soon as the light level is increased. This a.c. variation lasts for 15 to 45 minutes, is continuous at first and then starts and stops toward the end of the period.

The oscillation in image brightness is confined to a small area of the eye's field of view. Looking at a clock face center at three feet, the modulation is confined to an irregular area roughly bounded by a radial from the center to 8 o'clock, then around the circumference to 1 o'clock then back in a radial to the center. (The clock face is 4 inches in diameter.) The brightness variation corresponds to about 50% estimated amplitude modulation, plus or minus 10%. The effect is as though I were seeing a figure 8 shaped rotating blade of about 50% transmission whose rotation is only visible over the arc extending from 8 to 1 on the clock face.

The modulation rate I estimate at about 10 cycles per second which would correspond to perhaps 5 rps of a two bladed rotating shutter. The rate is just slightly too fast to count. This rotating figure 8 shaped shutter is what the image resembles, the effect of rotation is quite marked, sometimes to the right and sometimes to the left.

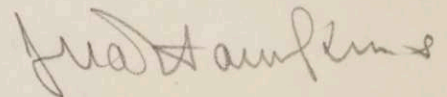
A second pulse modulation is superimposed on the 10 cycle rotating shutter modulation. The pulse repetition rate varies but is approximately on for one second and off for one tenth second.

Examination of the left iris by the right (normal) eye in a mirror shows no signs of visible oscillation and the left iris appears small and circular. The location of the modulation area stays fixed in size and location, with reference to the "Looking point" of the left eye. This implies that this phenomenon is confined to one particular spot on the retina and probably has no connection with the iris.

This, or a similar oscillation has been noted during convalescence following the last two Iritis attacks and may have been present earlier after the earlier attacks.

This subject is available for further study of this phenomenon in any way suggested. The subject is an electronics engineer employed by the Rollin Co. of Pasadena, Calif.

JNA Hawkins



1520 N. Santa Anita ave.  
Arcadia, Calif.



MEMORIAL CENTER

FOR CANCER AND ALLIED DISEASES

444 EAST 68TH STREET, NEW YORK 21, N. Y.

MEMORIAL HOSPITAL • JAMES EWING HOSPITAL, DEPARTMENT OF HOSPITALS, CITY OF NEW YORK • STRANG CANCER PREVENTION CLINIC  
SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH • SLOAN-KETTERING DIVISION, CORNELL UNIVERSITY MEDICAL COLLEGE

October 2, 1952

Professor Norbert Weiner  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Weiner:

I have recently read the article, "Some Maxims for Biologists and Psychologists" by yourself which appeared in DIALECTICA during 1950.

I should appreciate very much obtaining a reprint if you still have copies available. The concepts which you have formulated in this paper are particularly relevant to the research which the department of psychiatry at this hospital has been engaged in for the past few years.

Sincerely yours,

*Charles E. Orbach*

Charles E. Orbach, Ph.D.  
Research Psychologist

CEO:EH

sent -  
OCT 9

# THE TUFTS WEEKLY

---

Tufts College, Medford 55, Massachusetts

October 2, 1952

Dear Professor Wiener,

This letter is a reminder of our telephone conversation Tuesday night. This is in regard to the congratulatory statement by you in honor of Tufts one hundredth anniversary.

The Tufts "Weekly", our campus newspaper, is issuing a special commemorative edition for the Centennial celebration which will take place October 10-12 here on Hill. For this edition, we are contacting eminent men in the state, the nation, science, education, and other fields.

For this, you qualify doubly -- both as a noted scientist <sup>one</sup> and <sup>of</sup> the most famous of all Tufts graduates. We would be quite honored, here at the "Weekly", to have a statement from you for our special edition.

We would also appreciate a picture of yourself for publication. We are making up the paper Tuesday, so if you could mail your statement to the address on the letterhead, to arrive on Monday, it would help us considerably.

At the Convocation, such figures as Dr. Vannevar Bush, and President James Conant of Harvard will be the featured speakers, and an entire weekend program is planned.

Again, thank you very much.

Sincerely yours,  
*Paul B. Rosenberg*  
Paul B. Rosenberg  
Managing Editor  
Tufts "Weekly"

[ms 10/3/52]





SIMON AND SCHUSTER, INC.

*publishers*

ROCKEFELLER CENTER, 630 Fifth Avenue, New York 20 • CABLE ADDRESS *Essandess* • TELEPHONE *Circle 5-6400*

October 2, 1952

Dear Dr. Wiener:

I enclose first drafts of copy for the NOTE ABOUT THE AUTHOR and the JACKET COPY for your book. They are probably full of errors as the manuscript is no longer in the office for me to check.

I am sending them to you now in the hope that they will reach you before you leave for New York and that you may have some suggestions to make when you come in for lunch on Monday.

I am looking forward to greeting you at that time and only wish that Mrs. Wiener might be able to join us.

Sincerely yours,

*Nanny Simon*

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Mass.

hws:lf  
enc.

[ms 16/15/52]



Norbert Wiener

JACKET COPY

Like many another distinguished scientist, Norbert Wiener started as a child prodigy. Unlike the others, he has set down, in dramatic but unsentimental detail, just what it meant to grow up under that handicap.

Dr. Wiener's father, Harvard's first Professor of Slavonic Languages, was something of a prodigy himself - an adult prodigy of learning. He brought up his first-born deliberately to develop a naturally good mind as thoroughly and comprehensively as possible. Little Norbert had to recite all his school lessons twice - once for father, once for teacher. It is not hard to guess which recitation was the more instructive - and the more fearsome. The boy grew up to revere, love, and hate his father - a complex of emotions that has left its mark permanently. It is only in recent years that Dr. Wiener has been able to view his early history objectively. Here he has set down the story.

It is a story that traces more threads than this most prominent one. For example, strange as it may seem, it was only in late adolescence that Norbert Wiener realized that he was a Jew. The effect of this discovery, the effect of his early ignorance, and the effect of his inheritance in later life constitute another important thread.

A third thread traces the intellectual training of a scientist. At eleven, Norbert Wiener entered Tufts College as a Freshman; at fourteen he entered Harvard as a graduate student; at eighteen, having studied at Heidelberg and at Oxford under Bertrand Russell, he was invited to lecture at Harvard. At this time he was still uncertain whether his field would be philosophy or mathematics. The academic career was meanwhile interrupted by a term as a hack writer, another as a newspaperman, a third as a soldier in World War I. All these experiences went into the training



of the first-rank mathematician that Dr. Wiener became. And not the least of the elements of that training was his courtship and marriage.

Dr. Wiener frankly and fearlessly traces all these happenings and their effect on him. Some of the aspects are hilariously funny; some of them border *come very near to* very close on tragedy. But Dr. Wiener, who calls a halt in his story when he reaches full manhood, is the philosopher to see the significance of what happened to him in the broadest perspective. He knows that he is describing a childhood that *was unusual even in* may not be typical of America, but he makes it quite clear that a history such as his could have been lived in no other country. The early part of the book thus becomes a picture, often nostalgic, of a peaceful New England that is already a thing of the past; and the latter portions give a vivid account of a growing American scholarship taking its place in the wide world of learning.

But above all it is the personal history of a first-class mind inhabiting a very average world.



Norbert Wiener

A NOTE ABOUT THE AUTHOR

The name of Norbert Wiener is associated in the public's mind almost entirely with the word "cybernetics," a word and a science that owe their existence to the inventive and imaginative mind of Professor Wiener. It deals with communications <sup>in</sup> through both man and machine. The findings of this science were first published in book-form in 1948 in a volume entitled CYBERNETICS and addressed to the scientific world. In 1950 appeared Professor Wiener's more popular work in the same field under the title of THE HUMAN USE OF HUMAN BEINGS.

The son of a distinguished Harvard professor, Dr. Wiener has lived almost all his life in the academic world with, however, occasional excursions into the literary, the business, and even the military. Some of these excursions are described in the present volume.

At present, Dr. Wiener is Professor of Mathematics at the Massachusetts Institute of Technology, where he has been for the past thirty- years. His appointment constitutes less a teaching assignment than a roving commission to do any scientific work he finds necessary and attractive. Thus, mathematics has led him into psychology and electrical engineering, which fields he considers closely allied.

It is this type of bold thinking, this refusal to recognize in science any "hardening of the categories," that has marked the genius of valiant thinkers. The present volume presents an intensely personal history of this remarkable brain, and of the person and personality in which it developed.

both - and



# COPY

October 2, 1952

Mr. D. Chakravarti  
General Secretary, Indian Science Congress Association  
1 Park Street  
Calcutta 16  
India

My dear Sir:

I hope you will pardon my delay in answering your kind invitation to participate in the Indian Science Congress Association meetings. Your invitation attracts me very much, but I find it inadvisable to accept it for the present year.

In the first place, I have been abroad in Europe and Mexico for a considerable period in the recent past, and I came back from this so exhausted that my friends and doctors were afraid for my health. Although I am in much better shape now, they think that the time has not yet quite come in which I should have a further strain on my constitution. They expect that by next year, I shall be able to take such a strain without danger to myself.

Also, in the second place, I am very busy on a piece of work tying up generalized spectrum theory, statistical mechanics and quantum theory. I am very sanguine that I shall be able to obtain some important results, and I am happy to say that my colleagues seem to agree with me in their hopefulness. Under the circumstances, I think it would be wise for me to see this job through before any extensive travel and before undertaking what is, after all, the secondary job of reporting on this work instead of the primary job of doing it.

I have said that I am much complimented by your offer and I am very interested in it. If I should hear in the near future that there is a good prospect of your invitation's being renewed next year, I should be inclined to accept it. However, if you really wish me, I suggest that you send your invitation as early as possible so that I have a chance to adjust my commitments and responsibilities in advance.

There is another matter of which I am hesitant to write. You have not offered to pay the expenses of my travel to



# COPY

2.

and from India, although you have offered to pay all my expenses while I am in India. I can definitely not afford to pay the expenses of the trip out of my own pocket. Thus, I should be forced to look for other American funds to cover my expenses, and I feel this to be somewhat humiliating, both for me and for you. I am fully aware that under present circumstances, an India with serious problems confronting her may hesitate to spend what is, after all, a considerable sum of money, for the luxury of importing a foreign scientist for a brief course of lectures. But you must realize that things do not look the same way to the scientist. Unquestionably, all Americans in academic work live on a scale which must seem to be great wealth in India, but please remember that this larger scale governs our expenditures as well as our incomes. I shall quite understand if it does not seem worthwhile to you, under these circumstances, to extend a second invitation to me. But I also hope that you will not be hurt if I find that it is impossible to come on the terms you have suggested.

I am much impressed by the growth of science in India, and I have many friends whom I should like to see again. With the increased rapidity of modern communications, this now seems an easy matter. But the fact remains that except in the one matter of time, a trip to India is still a major undertaking.

Sincerely yours,

Norbert Wiener

hb

HENRY L. BOCKUS, M. D.  
THOMAS A. JOHNSON, M. D.  
JAMES L. A. ROTH, M. D.  
250 SOUTH EIGHTEENTH STREET  
PHILADELPHIA 3, PA.

October 3, 1952.

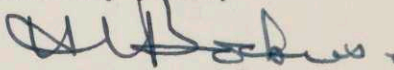
Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, 39, Mass.

Dear Dr. Wiener:

Many thanks for your note of October 1st.  
You will find a room awaiting you at the Hotel Barclay  
upon your arrival Tuesday afternoon.

I will stop for you at the hotel about  
6:15 to take you to dinner and the meeting place. It was  
nice to know that your wife will be with you.

Sincerely yours,

  
H. L. Bockus, M.D.

HLB/d



Fran 6666 - Oct 7

27. Bedford St  
Fall River, Mass  
October 3, 1952

Dr. Herbert Weimer  
Mass Institute Technology

Dear Sir

I have read an article about a glove used to hear which you have developed. Will this glove help a person totally deaf from meningitis for a period of eight years. The specialist Dr. Donovan says that the auditory nerve is damaged or

Dear, Hoping you can  
give her a ray of hope.  
Enclosed find a self-addressed  
stamped envelope which I  
hope you can find time  
to use.

Thanking you in advance  
I am

Sincerely yours

Hector A. Clement



# THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

TWENTY-NINE WEST THIRTY-NINTH STREET

NEW YORK 18

October 3, 1952

FROM THE OFFICE OF GEORGE AUBREY HASTINGS  
Director of Public Relations, ASME  
One Madison Avenue  
(Tower 312-A)  
New York 10, N. Y.

## IMPORTANT!

To speakers at the ANNUAL MEETING in New York, N. Y., November 30-December 5, 1952.

You are listed on the program for this meeting to give a technical paper or an address. There is great interest in this meeting on the part of newspapers, periodicals and wire services. Will you please send me just as soon as possible two copies of your manuscript for use in preparing advance publicity. One set of illustrations if you have them, would be helpful.

These copies are not to be confused with those sent to the Society for committee review, etc. Please send these direct to me addressed as follows:

George A. Hastings  
Director of Public Relations, ASME  
One Madison Avenue, (Tower 312-A)  
New York 10, N. Y.

It is absolutely necessary for us to have these as far ahead as possible to digest and prepare a release carefully. We will want to mail the releases in advance to certain publications, who will not be represented at the meeting, for release upon delivery for use in their publications.

If you will speak without a prepared manuscript, an advance digest of your remarks would be appreciated -- 300 or 400 words stressing points of general or popular interest. In the case of highly technical papers, abstracts will be helpful in addition to the full text.

It is our plan, as in past years, to prepare advance releases on newsworthy material on the annual program. Our press releases go to leading newspapers and wire services, to science, engineering and industrial writers, to technical and trade periodicals. They are prepared conscientiously by experienced technical writers. Thus a wider reading public and greater accuracy of quotation are assured. We think this type of national coverage is an asset to the Society, to the profession, to the speakers and to their group or industry.

Your prompt reply will be appreciated.

Sincerely yours,

*George A. Hastings*



# THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

TWENTY-NINE WEST THIRTY-NINTH STREET

NEW YORK 18

October 3, 1952

FROM THE OFFICE OF GEORGE AUBREY HASTINGS  
Director of Public Relations, ASME  
One Madison Avenue  
(Tower 312-A)  
New York 10, N. Y.

## IMPORTANT!

To speakers at the ANNUAL MEETING in New York, N. Y., November 30-December 5, 1952.

You are listed on the program for this meeting to give a technical paper or an address. There is great interest in this meeting on the part of newspapers, periodicals and wire services. Will you please send me just as soon as possible two copies of your manuscript for use in preparing advance publicity. One set of illustrations if you have them, would be helpful.

These copies are not to be confused with those sent to the Society for committee review, etc. Please send these direct to me addressed as follows:

George A. Hastings  
Director of Public Relations, ASME  
One Madison Avenue, (Tower 312-A)  
New York 10, N. Y.

It is absolutely necessary for us to have these as far ahead as possible to digest and prepare a release carefully. We will want to mail the releases in advance to certain publications, who will not be represented at the meeting, for release upon delivery for use in their publications.

If you will speak without a prepared manuscript, an advance digest of your remarks would be appreciated -- 300 or 400 words stressing points of general or popular interest. In the case of highly technical papers, abstracts will be helpful in addition to the full text.

It is our plan, as in past years, to prepare advance releases on newsworthy material on the annual program. Our press releases go to leading newspapers and wire services, to science, engineering and industrial writers, to technical and trade periodicals. They are prepared conscientiously by experienced technical writers. Thus a wider reading public and greater accuracy of quotation are assured. We think this type of national coverage is an asset to the Society, to the profession, to the speakers and to their group or industry.

Your prompt reply will be appreciated.

Sincerely yours,

*George A. Hastings*



October 3, 1952

Mr. Dennis Flanigan  
SCIENTIFIC AMERICAN  
2 West 45th Street  
New York City

Dear Mr. Flanigan:

I am glad you postponed writing. This gives me time to write you, and I hope Piel will read this letter too.

I do not think that your letter, as you read it to me over the phone, would do anything to allay Wiener's feelings. As to the fact that he is twice mentioned in a bibliography, it is singularly cold comfort.

If you do not mind, I would like to go for a moment into fundamentals. If I did not have so high an opinion of the S.A. and of its editors, I would not even submit these thoughts to you. But you are not average editors.

You stand upon the unassailable right of the editor to dispose of material as he sees fit once he has paid for it. This is the cornerstone of American publishing, and one cannot answer back. But don't you see it solves nothing either? Your issue remains what it is, without a mention of Wiener, and it is in a way as incongruous as a play without one of its chief characters.

What happened, of course, is simply this: the editors found that the piece did not come up to exactly what they wanted and chose to drop it. This implies that the editors know exactly what a philosophical treatment of cybernetics ought to be like. They should then have instructed one of their writers, Mr. XY, Social Security number so and so, to express it. If the fellow provided the wrong thing, he had been paid and that was that. This whole episode is based on the idea of the interchangeable specialist which is at the core of the American system. But it happens that Wiener is not only coincidentally associated with cybernetics, that in fact he is the thinker who has the whole system most clearly in mind, being largely the author of it, and



October 3, 1952

the only man of trained philosophical capacities among the group, and that his philosophical thoughts on it might have some relevance for a certain number of people even if an editor does not happen to think them significant. I know that this is uttering sacrilege; but there is a point at which the Unassailable Cornerstone can begin to look faintly absurd, and the proof is that now your issue does not look right even to you.

This idea of delivering goods to fit the customer is admirable for prosperity, but then you should not wonder if American philosophy has remained hitherto in the state of nothingness which makes it so conspicuous, and will go on staying there, notwithstanding the vast sums poured by foundations down the gullet of pallid graduates, who in turn conscientiously turn out meaningless stuff.

The ideas that we were expressing were not meant for the absolutely average consumer; they might, however, have aroused interest in certain bright young minds which are entrusted with the thought of tomorrow, ~~is~~ such there is going to be. I saw them strike young men in Europe this summer when I discussed them, and impress people quite vividly at the International Conference at Geneva, so much so that I was requested to put my talk again on tape for the Paris Radio. Therefore, I have a fairly good check that the stuff was not utter bilge.

Now unfortunately, your behavior in the matter implies just that, and your polite administrative tone is that which has been developed by editors to convey just this sorry fact, again interchangeable with others, so as to spare people's feelings. Wiener's immediate reaction therefore was that it was my fault, and that I wrote what had been adjudged too bad an article to be published in any form, forgetting the fact that he read it and corrected it himself and was highly pleased with the outcome. This is forgivable because it is all-too-human. No couple of mentions in your bibliography will change his feelings, because it remains ~~his~~ *impression* that you did not think his name meant enough to stand in the magazine even at the price of some editorial concessions.

There is some ground for such suspicions. Piel came to Boston with a request for some minor changes and additions of which I provided about half on that very hot day.

If Piel had felt that the piece was unusable, he would have told me so, and we would have discussed together a way of explaining it to Wiener. He obviously did not, and after some shifts and additions, we fled from the heat in tall gin-and-tonics. The understanding was that the rest could be fixed in N.Y. and the



October 3, 1952

text mailed to Wiener for an OK which would not have been withheld. The next thing I heard was that Piel, answering a different request of mine from Rome, let drop the news that the editors would have needed still more changes but that they did not feel equal to dealing with Wiener, and that therefore they were dropping the article. Now since the editors of the S.A. are not worried neurotics, it meant that they did not think enough of the issue to pursue it further. Apart from the fact that they did not even think it necessary to tell me so. This is exactly what Wiener knows, and no polite correct letter from you explaining your rights will make it any better.

Allow me to suggest that there was some mistake somewhere along the line, imputable to the system no doubt, and that the best thing would be to tell him so in a nice and generous way, and to make up with him if you feel it is at all worthwhile. Otherwise silence would be preferable.

I know very well that these thoughts are a commentary on a whole way of life, about which there is little to do. I am seeing what happens here at Tech. We have imported at no small expense Sir Richard Livingstone from England and duly advertised him around. I overheard some students yesterday talking about this new man who teaches a section of History 41, and he was clearly to them some kind of superannuated instructor with a foreign accent, that it would be best to avoid. This was admirably democratic no doubt, and it is good that students should stand by what their sense organs and straight judgment tell them. But if they had thought of him for a second as <sup>Regius</sup> Professor of Greek, Chancellor of Oxford University, and the man who knows most about Plato today, it might have helped them listen to what he has got to say, and our good money would be less wasted. This last story, of course, strictly off the record. It would happen in any American university.

GDS:ndh



Q. Have you entered a plea to that indictment?

A. I have.

Q. What is that plea?

A. Guilty.

Q. Are you now in the custody of the United States Marshal?

A. I am.

Q. Now, prior to the time you were remanded to the custody of the United States Marshal, what was your home [fol. 548] address?

A. 265 Rivington Street.

Q. That is here in Manhattan?

A. Yes.

Q. How old are you?

A. 29.

Q. When were you born?

A. March 3, 1922.

Q. Are your parents alive?

A. My father is dead. My mother is alive.

Q. Do you have any brothers and sisters?

A. I have two brothers and one sister.

Q. Your sister is the defendant Mrs. Ethel Greenglass Rosenberg, is that correct?

A. That is true.

Q. And another defendant, Julius Rosenberg, is your brother-in-law?

A. That is true.

Q. Is Mrs. Rosenberg older or younger than you are?

A. Older.

Q. What are the names of your brothers?

A. One brother is Samuel. One is Bernard.

Q. Are you yourself married?

A. I am.

Q. What was your wife's maiden name?

A. Ruth Printz.

Q. How do you spell that?

A. P-r-i-n-t-z.

Q. When were you married?

A. November 29, 1942.

Q. Do you have any children?

A. I have two.

Q. How old are they?

A. One is nine months old and one is four years old.

Q. Boys or girls?

A. One is a girl. One is a boy.

Q. Where were you educated, Mr. Greenglass?

[fol. 549] A. I was educated in New York.

Q. Would you tell us briefly the schools which you attended here in New York?

A. I went to P.S. 4, P.S. 97, Haaren Aviation School, Brooklyn Polytechnic and Pratt Institute.

Q. What field have you pursued since your graduation from public school?

A. I am a machinist.

Q. Have you studied the work of a machinist and related problems while you were at Aviation School?

A. Yes.

Q. And also at Pratt Institute, is that correct?

A. Yes, sir.

Q. Is that correct?

A. Yes, sir.

Q. After you left school and prior to 1943 did you have any practical experience as a machinist?

A. I did.

Q. Here in New York?

A. In New York.

Q. Now, in 1943 did you enter the Army of the United States?

A. I did.

Q. As a private?

A. Private.

Q. When in 1943 did you go into the Army?

A. April, 1943.

Q. After that did you have basic training?

A. Yes.

Q. Where was that?

A. Aberdeen, Maryland.

Q. Were you thereafter assigned to work as a machinist while in the Army?

A. I was.

[fol. 550] Q. After that did you go to ordinance school?

A. I went to ordinance school, yes.



Q. What did you do out there?

A. It was a shop—

Mr. E. H. Bloch: Out where?

Q. The ordinance school: where was the ordinance school, Mr. Greenglass?

A. In Aberdeen, Maryland.

Q. I think you said it was a shop?

A. It was a shop.

Q. And did you pursue your trade as a machinist in that shop?

A. I did.

Q. How long were you at Aberdeen?

A. Until July.

Q. That is July of 1943?

A. Yes.

Q. Now, am I correct in stating that during the next year, July, 1943, to July, 1944, you were stationed at various posts, Army posts, throughout the United States?

A. I was.

Q. You were stationed at a number of them?

A. A number of them.

Q. Different parts of the country?

A. Yes.

Q. Now, in July of 1944, did you receive a new assignment?

A. I did.

Q. To what location? At what location?

A. To Oak Ridge, Tennessee, the Manhattan Project.

Q. The Manhattan Project District?

The Court: When was that?

[fol. 551] The Witness: It was July, 1944.

Q. July of 1944. You were assigned to the Manhattan District Project of the United States Army, is that correct?

A. That is right.

Q. Did you at that time know what the Manhattan District Project of the United States Army was?

A. I did not.

Q. You know now it was the project in charge of construction of the atomic bomb, is that correct?

A. I do.

Q. Now, when you were out at Oak Ridge, Tennessee, in July of 1944, how long did you stay out there?

A. About two weeks.

Q. Now, during that period were you given any security lectures?

A. I was.

Q. Did they concern the new duties you were to undertake?

A. Yes, they did.

Q. Were you told anything about the nature of those duties and the nature of the work at Manhattan Project?

A. I was.

Q. What were you told?

A. I was told that it was a secret project.

Q. Were you told at that time what was going on at that project, what was being constructed?

A. No.

[fol. 552] Q. You were told nothing about that, is that correct?

A. Nothing at all.

Q. Was the Espionage Act mentioned to you in connection with revealing any information as to what was going on in the Manhattan Project?

A. It was.

Q. After your two weeks' orientation at Oak Ridge, Tennessee, were you then assigned to report to some other place in the United States?

A. I was.

Q. Where was that?

A. Los Alamos, New Mexico.

Q. How did you go out there?

A. Train, all the way.

Q. About when did you report at Los Alamos?

A. August, 1944.

Q. When you reported at Los Alamos were you given certain instructions concerning the duties you were to pursue out there?

A. I was interviewed for a job.

Q. Did there come a time when you were told that you would work as a machinist in the shop?

A. That is right.

Q. Were you told at that time the nature of the work being done at Manhattan Project?

A. No.

Q. Was the fact that it was secret reaffirmed to you?

A. It was.

Q. Were you told just how much you were to know about what was going on at Manhattan Project?

A. I was told I was to know as much as was necessary to do my job.

A. And nothing more?

A. Nothing more.

[fol. 553] Q. Now, would you tell us at this point when it was that you learned for the first time that the Manhattan Project District was the district of the United States Army concerned with the construction of the atomic bomb?

A. When my wife came to visit me in November, 1944, she told me that Julius had told her—

Mr. E. H. Bloch: I object to any conversation between this witness's wife and himself outside the presence of the defendant Julius Rosenberg.

The Court: She is named as a co-conspirator.

Mr. E. H. Bloch: I respectfully except.

The Court: Objection overruled.

Q. Will you tell us again? I think you said the time was November, 1944?

A. Right.

Q. What did your wife tell you?

— She told me that Julius had said that I was working on the atomic bomb.

Q. And that was the first you knew of it?

A. That was the first I knew of it.

Q. You had never been told that by anybody in an official capacity of the United States Government?

A. No, sir.

Q. Now, going back to August of—

The Court: Will you just slow up the slightest bit because I am trying to make some notes.

Mr. Cohn: I will be glad to. I am trying to get over some of the preliminary points.

[fol. 553-a] Q. In August of 1944, Mr. Greenglass, when you took up your duties at Los Alamos, will you tell us—

The Court: Excuse me. When was that conversation with your wife? November?

The Witness: At the end of November, 1944.

The Court: Very well.

[fol. 554] Q. About several months after you first went to Los Alamos; is that right?

A. It was.

Q. During that first few months you did not know just what was being done at Los Alamos?

A. That's right.

Q. Now, I think you said you were assigned to work as a machinist?

A. I was.

Q. And where, physically, was your work done?

A. It was at a shop called the "E" building shop or the "student shop".

Q. Where was that located?

A. In "E" Building, in the tech. area, at Los Alamos.

Q. By the "tech. area", you mean the technical area?

A. Technical area at Los Alamos.

Q. Out at Los Alamos, this shop was located in one of the buildings out at Los Alamos; is that right?

A. That's right.

Q. You were assigned to work there as a machinist?

A. I was.

Q. Now, you said the "E" shop; did this letter "E" have any significance?

A. It was the building I was in.

Q. That was the building you were in?

A. Yes.

Q. Now, were you a member of a group out there? Was this building and was the machine shop under the jurisdiction of a particular group of the Manhattan District [fol. 555] Project, at Los Alamos?

A. It was.

Q. What was the name of that group?

A. It was the "E" group.

Q. The "E" group?



A. Right.

Q. Now, did the "E" group have a head or a leader?

A. It did.

Q. What was he called?

A. His name was Kistiakowski.

Q. Is that Dr. George B. Kistiakowski of Harvard University?

A. That's right.

Q. And do you know what his professional standing is, in what field he is known?

A. Yes, I do.

Q. What is that field?

A. Thermodynamics man.

The Court: Speak up.

Mr. E. H. Bloch: I didn't get that, I am sorry.

The Witness: He is a thermodynamics man.

Q. Thermodynamics?

A. Physical chemistry.

Q. In general terms, what was group "E" concerned with?

A. With high explosives.

Q. High explosives?

A. Yes.

Q. Did you have any other superiors in addition to Professor Kistiakowski?

A. I did.

Q. Will you tell us?

A. The foreman of the shop was a man by the name of De Mars, a civilian. I don't know how to spell his name. [fol. 556] Mr. Cohn: I don't either, your Honor, but we will check it.

Q. You say he was the foreman of the shop?

A. That's right.

Q. Did you have any superiors between the foreman of the shop and Dr. Kistiakowski, who was the leader of "E" group?

A. I did.

Q. Who was that?

A. His name was Fitzpatrick.

Q. Was he a civilian?

A. He was a GI.

Q. What was his rank?

A. Well, later on he became a Master Sergeant. I don't recall his rank at the time.

Q. And what was his title?

A. He was in charge of procurement and the machine shop of "E" group.

Q. He was in charge of procurement and this machine shop, this shop "E"?

A. For the "E" group.

Q. In other words, the structure was, out in Los Alamos, the "E" group, headed by Dr. Kistiakowski and concerned with high explosives; under Dr. Kistiakowski there was Sergeant Fitzpatrick—

A. That's right.

Q. —in charge of and concerned with procurement, and in so far as the shop itself, it had a foreman and that foreman was Mr. De Mars, at the beginning, I think you said?

A. That's right.

Q. And you were one of the machinists?

A. I was one of the machinists.

[fol. 557] Q. About how many machinists would you say were assigned to that shop?

A. Oh, there were about—the greatest amount was about 10 machinists.

Q. Would the number vary from time to time?

A. Yes, it would vary.

The Court: May I suggest, Mr. Cohn, that you stand back a little bit.

Mr. Cohn: All right.

Q. Now, did there come a time when Mr. De Mars was transferred, gave up his duties as foreman?

A. He did.

Q. Did you get another foreman out at the shop?

A. I did.

Q. What was his name?

A. Bob Holland.

Q. Holland, H-o-l-l-a-n-d?

A. Right.

Q. Now, after Mr. Holland's assignment, was there any change in your duties?

A. I became the assistant foreman.

Q. You became the assistant foreman?

A. Yes.

Q. Did there come a time when Mr. Holland left?

A. There was.

Q. About when was that?

A. Oh, the end of '45, beginning of '46.

Q. After Mr. Holland left, was there any further change in your duties?

A. I became the foreman of the shop.

[fol. 558] Q. Did you continue to hold that position until you were discharged from the Army of the United States?

A. I did.

Q. When were you so discharged?

A. In the last day of February, 1946.

Q. Were you honorably discharged?

A. I was.

The Court: Then for what period of time were you foreman?

The Witness: I would say a period of about two, two and a half months.

Q. Just prior to your discharge from the Army; is that right?

A. That's right.

Q. Will you tell us, were you a non-commissioned officer when you were discharged from the Army?

A. I was.

Q. What rank?

A. T/4, sergeant.

Q. T/4, sergeant?

A. Yes.

Q. Sergeant T/4?

A. Yes.

Q. Now, going back to the time when you undertook your duties as a machinist at this "E" shop out at Los Alamos, would you tell us, tell the Court and jury in general terms just what your duties were, what you did over the period of time you were working in the machine shop, as a general proposition?

A. Well, the shop itself took jobs from various scientists and made apparatus whenever they needed it; and there [fol. 559] were two methods of jobs coming through the shop. One was to—when a scientist needed a piece of apparatus, he just sent it through procurement and it was sent to either one of the three shops in the technical area.

Q. There were three shops; is that right?

A. There were three shops.

Q. What were the names of the other two?

A. "V" and "C" shop, which were bigger than mine; both were bigger than mine.

Q. Yours was the smallest shop; is that right?

A. Ours was the smallest shop.

Q. Go ahead.

A. That was one way; and they would be distributed according to how much work each shop had. The other way was go directly to Fitz and say, "How about getting this job done"? And usually it was put through, or the sketch or piece of paper or the scientist talking to one of us machinists to do it.

Q. In other words, it was your job to machine this particular—

A. Apparatus.

Q. —apparatus or product that the scientist required in connection with his experimentation on atomic energy; is that correct?

A. That is correct.

Q. Now, did the physical location of your "E" shop remain the same during your entire stay at Los Alamos? [fol. 560] A. No, it didn't.

Q. When was there a change?

A. Oh, it was in the fall 1944, we had a building built and the whole procurement section moved into that building. It was called the "Theta" building.

Q. Theta building, and the shop under which you undertook your duties was known as "Theta" shop?

A. Theta.

The Court: How do you spell that "Theta"?

The Witness: T-h-e-t-a.

Mr. Cohn: It is a Greek letter.

The Witness: A Greek letter.



Q. Was there any change in your duties when you went over to Theta shop?

A. They remained the same.

Q. You were doing the same thing, but the physical location had changed; you had been in the "E" shop before and you were now in the Theta shop?

A. That's right.

Q. Did you continue to work in the Theta shop, in the various capacities you have described, until the time that you left Los Alamos?

A. I did.

Q. Did you continue to do work such as that which you have described to us?

A. That is correct.

Q. Now, you have told us about the security talks you had at Oak Ridge and about what was told you [fol. 561] concerning the secret nature of your work when you got out to Los Alamos. In addition to these oral instructions, were you given any written material containing security regulations and telling you just what you were at liberty to disclose and what you should not disclose?

A. I was given such a book.

Mr. Cohn: May this be marked for identification, your Honor?

(Marked Government's Exhibit 1 for identification.)

Mr. E. H. Bloch: May we look at it?

Mr. Cohn: As soon as I offer it in evidence, Mr. Bloch, certainly.

Q. Would you just look at this, look through it for a minute, Mr. Greenglass (handing to witness); have you examined Government's Exhibit 1 for identification?

A. I did.

Q. Do you recognize that?

A. It is a photostat of the booklet that I received at Los Alamos.

Mr. Cohn: I offer it in evidence, your Honor.

Mr. A. Bloch: Objected to on the ground it is incompetent, irrelevant and immaterial, not binding on my defendant.

The Court: Overruled.

Mr. A. Bloch: Exception.

Mr. E. H. Bloch: I suppose when Mr. Bloch said his [fol. 562] defendant, that means all defendants?

The Court: That is correct.

Mr. E. H. Bloch: Could I see it?

Mr. Cohn: Yes (handing).

Mr. E. H. Bloch: I will try to be as quick as I can.

Mr. Cohn: It is all right.

(Government's Exhibit 1 previously marked for identification received in evidence.)

The Court: Are you going to call certain portions to the attention of the jury?

Mr. Cohn: I am, your Honor. I might read just a few brief portions to the jury, pass it around so that they can examine the whole thing, and if any of the gentlemen of the defense feel I have omitted anything I should have read, I assume they will be at liberty to do that now that this has been received as Government's Exhibit 1, your Honor.

The Court: All right.

Mr. Cohn: I may say to the jury, the exhibit itself is marked "Restricted". The word on the beginning of the first page is "Security". The first two paragraphs read as follows:

"This handbook has been designed to provide members of the technical area staff and their families [fol. 563] with a concise summary of existing security regulations. It should be understood that to obey these regulations is a minimum requirement. There is a further obligation on the part of everyone to maintain a constant, and intelligent interest in the prevention and reporting of all incidents whose occurrence endangers the security of the project. It is a basic policy of the project that everyone working here should know whatever is required for doing his job well. It is therefore of greatest importance for each person to understand that he is in a position of trust with regard to all such information and also with regard to information which he may accidentally gain about other confidential matters".

[fol. 564] There is further descriptive material. On page 2 there is a section entitled "Communication".

"(A) There must be no conversation outside the technical area, or in the presence of unauthorized persons, and no information in personal letters, conveying any of the following kinds of information:

- "1. The purpose of the project.
- "2. The general problems being worked on.
- "3. Technical data connected with 1 or 2 above.
- "4. The scheduling or general progress of the work.
- "5. Any overall account of the personnel employed on the project.

"6. The procurement or presence here of essential materials and installations.

"By 'unauthorized persons' are meant persons whom you do not know to have the permission of their group or divisional leaders or the director to receive the information in question.

"(B) There must be no conversation outside the post, or in the presence of unauthorized persons, and no information in personal letters, conveying any of the following kinds of information:

[fol. 565] "1. The professions or former connections of persons working in the technical area.

"2. The name of the contractor under whom the project is being run.

"3. Affiliation of this project with other war projects.

"4. The size of the project or post, or other significant features such as water supplies, fire-protection installations, etc."

"5. The general kinds of work going on in the technical area. We are engineers; the technical area should be called only 'the technical area'.

"By 'unauthorized persons' are meant persons who do not live in or have access to the post, or who, living here, have no reason to receive the particular class of information.

"6. Your address, P.O. Box 1663, Santa Fe, New Mexico, may be given to family, friends, and in pri-

vate business dealings. Do not use Los Alamos stationery in private correspondence".

Then there are further restrictions concerning the receipt of mail; travel—the employees are instructed not to establish or maintain social relations with anyone living in neighboring communities; not to have friends visit them [fol. 566] out there; are told not to fill out any questionnaires, licenses, applications or anything else without first consulting the Personnel Office as to the propriety of the detailed information requested by that application; and to report any people without the proper badge—

By Mr. Cohn:

Q. By the way, were badges worn out there?

A. They were.

Q. Having different significance?

A. They were.

Q. How did they go, by color?

A. By color.

Q. What did a color represent?

A. A white badge was authorized to go to the seminars and be let in on all the information that was available on the bomb.

Mr. E. H. Bloch: May I ask your Honor to instruct the witness to raise his voice, please?

The Court: Yes, we have had the same difficulty with the other witness.

Mr. E. H. Bloch: I think the acoustics in here are very bad. We had the same difficulty at the last trial.

The Court: The only thing we can do is to have the questioner stand back and therefore the witness will direct his answers to you and that may help in that respect.

[fol. 567] Mr. Cohn: I am not going to read any more of this. May I pass this to the jury?

The Court: Did you hear that last answer? Do you want it reread?

Mr. A. Bloch: Will you read the last answer?

(Answer read.)



Q. That was a white badge?

A. That was a white badge.

Q. Were there any other colors?

A. There was a red badge which allowed the bearer to get all the information necessary to be able to do his job; and then there was a blue badge which allowed—well, it allowed the bearer to go into the tech area to do various jobs like steam-fitting or ditch-digging, but not to be around any of the equipment or to see any of the experiments.

Q. Now, I assume that is what this regulation refers to when it says that you are to report any person wearing the wrong badge to the authorities?

A. That is right.

Q. When observed in a certain area?

A. That is right.

Q. Did you yourself have a badge?

A. I did.

Q. Now, specifically, you told us that Dr. Kistiakowski was out at Los Alamos and was in fact the leader of [fol. 568] Group E?

A. Right.

Q. And that his reputation is in the field of physical chemistry?

A. That is right.

Q. Thermodynamics?

A. That is right.

Q. While out at Los Alamos did you come to learn the identity of any other scientists who were present and working on atomic energy?

A. That is correct.

Q. Would you name one or two of those?

Mr. E. H. Bloch: Is it contended that this testimony will connect up any of the defendants?

Mr. Cohn: Quite definitely, your Honor.

A. I did get to know a number of scientists and some of world fame, for instance, Dr. Oppenheimer, whom we knew as the head of the project.

Q. J. Robert Oppenheimer?

A. That is right, and there was Neil Bore, whom I first knew as Baker.

Q. What do you mean by that?

A. It was a pseudonym to keep his identity secret.

Q. You mean that Dr. Bohr was known at Los Alamos by an assumed name, that of Baker?

A. That is right, Mr. Baker.

Q. And you knew at first that there was a man named Mr. Baker, a scientist?

A. That is right.

Q. Was there a period of time during which you yourself did not know who Mr. Baker actually was?

[fol. 569] A. That is correct.

Q. And did there come a time when you found out who he was?

A. That is right.

Q. And who is he?

A. Mr. Baker was Neils Bohr. He is a nuclear physicist.

Q. Considered one of the outstanding in the world, is that correct?

A. That is correct.

Q. Do you recall whether the fact that Dr. Bohr was out in Los Alamos was secret information?

Mr. E. H. Bloch: When was this? Will you fix the time, please?

Q. Will you tell us the best you remember when you first knew that Mr. Baker, a man named Mr. Baker, was out there?

A. It was about September or October of 1944.

Q. You knew him only as Baker, is that right?

A. That is right.

Q. Was it shortly thereafter you found out who he really was?

A. That is right.

Q. And you were told he was Dr. Bohr, is that correct?

A. That is right. In passing one of my colleagues said, "That's Baker and he is Neils Bohr".

Q. You knew that the information as to who Dr. Bohr out there was was secret?

A. I did.

Q. As a matter of fact, I think that this very security [fol. 570] pamphlet states that the identity of scientists out there and their former occupation was not to be discussed by any unauthorized person, is that right?

A. That is right.

Q. I assume as a practical matter that one's former occupation in a particular field of science would be a clue to the particular work he might be doing?

A. That is correct.

Q. Is that the reason for this regulation?

Mr. E. H. Bloch: If he knows.

A. That is the reason for it.

Q. In addition to Mr. Baker whom you came to know as Neils Bohr and Dr. Oppenheimer, may I ask you specifically, did you know that Dr. Harold Urey was connected with the Manhattan project?

A. I did.

Q. About what point after your arrival at Los Alamos did you learn that fact?

A. Oh, it must have been about December or so.

The Court: When did you learn about Dr. Oppenheimer? I do not think you told us about that.

The Witness: That was almost at the beginning of the time I was there.

Mr. E. H. Bloch: Your Honor, I will object and am objecting to whether or not this particular witness knew some of the most renowned scientists at Los Alamos [fol. 571] unless this particular information is related to the issues in this case so far as it bears upon the guilt or innocence of the defendants.

Mr. Cohn: I would be glad to state to your Honor that the name of each scientist which has been spoken by Mr. Greenglass from this stand and will be directly related to the defendants in this case and specifically to Mr. Bloch's client.

The Court: Very well.

Mr. Cohn: I make that representation.

The Court: Very well.

Q. And there were other scientists there, is that correct?

A. That is correct.

Q. Whose identities you had learned?

A. Yes.

Q. Now, was one of the scientists who was present at Los Alamos and whose name and presence you came to know Dr. Walter Koski?

A. That is correct.

Mr. Cohn: I believe Dr. Koski is here in court. Would you rise, Dr. Koski?

(A man rises in courtroom.)

Q. Do you recognize Dr. Koski here in court?

A. I do.

Q. Did you do any work at any time in connection with apparatus that Dr. Koski required in the course of his experimentation on atomic energy?

A. I did.

[fol. 572] Q. Did you specifically work in the machining of a flat type lens mold and other molds which Dr. Koski required in the course of his experimentation on atomic energy?

A. I did.

Mr. E. H. Bloch: May I just make a suggestion. I am going to suggest to the Court and the Court indirectly to Mr. Cohn that when on subjects which have been referred to in previous documents that his questions not be leading and suggestive and that he try to avoid leading and suggestive questions.

Q. You say you yourself—

The Court: Just a moment. What was the last question and answer?

(Question and answer read.)

[fol. 573] (Question read.)

Q. Now did there come a time when the first atomic explosion took place?

A. Yes.

Q. When was that?



A. July, 1945.

Q. Where?

A. Alamogordo, New Mexico.

Q. In the course of your employment at Los Alamos did you hear discussion concerning this atomic explosion?

A. I did.

The Court: Was that after the explosion or did you hear about the anticipated explosion?

The Witness: I heard of an explosion to take place at Alamogordo.

Q. Was that before?

A. I heard that before. Afterwards I heard of the atomic explosion that took place at Alamogordo.

Q. Now am I correct in stating that during the entire period of your stay in Los Alamos, 1944 to the time you were discharged in 1946, you worked in the machine shop and in the Theta shop on apparatus and equipment in connection with experimentation on atomic energy?

A. I did.

Q. Was that work pursued in the manner you have described here from sketches supplied and verbal descriptions by the particular scientists out there who required the apparatus?

A. I did.

[fol. 574] Q. I think you have told us, Mr. Greenglass, that your sister, Ethel, was a number of years older than you are; is that correct?

A. She is.

Q. Do you remember in what year she was married to the defendant Julius Rosenberg?

The Court: How much older is she?

The Witness: Six years older.

Q. Do you remember the year in which she was married to the defendant Julius Rosenberg?

A. 1939.

Q. Had you come to know Julius Rosenberg before your sister married him?

A. I did.

Q. Was he around your house?

A. Yes, he was.

Q. And you were 17 years old at the time they were married, is that correct?

A. That is correct.

Q. Now did you have any discussion with Ethel and Julius concerning the relative merits of our form of government and that of the Soviet Union?

Mr. A. Bloch: Objected to as incompetent; irrelevant and immaterial, not pertinent to the issues raised by the indictment and the plea.

Mr. E. H. Bloch: And upon the further ground that this will obviously lead to matters which may only tend to confuse the jury and inject inflammatory matter which will make it difficult or almost impossible for the jury to confine themselves to the real issues in the case.

[fol. 575] Mr. Cohn: Your Honor, of course, the views of the defendants on the relative merits of this country and the Soviet Union are extremely relevant when the charge is conspiracy to commit espionage, in that material would be transferred to the Soviet Union to be used to the advantage of the Soviet Union. I specifically cite the case of Haupt vs. United States, a decision of the United States Supreme Court which I think is particularly in point.

The Court: What did the case hold?

Mr. Cohn: The case holds, and I quote, the Supreme Court held in sustaining a treason conviction, they held that statements by the defendant showing sympathy with Germany and with Hitler and hostility to the United States were admissible as competent testimony.

The Court: What you are trying to bring out from the witness is the fact that the defendants expressed some form of favoritism to Russia in their discussions?

Mr. Cohn: Exactly, your Honor, and I am refraining from any discussion of parties or anything along those lines.

The Court: I believe it is relevant.

Mr. A. Bloch: One further statement I want to make in [fol. 576] my objection. The further objection is that the time in which such discussions were had is not specific. If it is a number of years prior to the time charged in the indictment it would be too remote.

The Court: Well, if it is too remote—

Q. You say you gave her a general description of the layout at Los Alamos, is that right?

A. That's right.

Q. How about the number of people there, the personnel, did you give any estimate of figures on that?

A. I gave her an estimate of how many people there were in the technical area.

[fol. 595] Mr. A. Bloch: May I ask to have the last answer repeated.

The Court: Repeat it, please.

(Answer read.)

Q. Of course, the repeating of this specific information is forbidden in that security book which is in evidence as Government's Exhibit 1, is that correct?

Mr. E. H. Bloch: I think the exhibit speaks for itself, your Honor.

Mr. Cohn: I will withdraw it, your Honor.

The Court: I was about to overrule the objection because of its unimportance.

Mr. Cohn: It is unimportant and that is why I withdrew the question.

The Court: It speaks for itself and the answer would merely have been cumulative, so it makes no difference.

Mr. E. H. Bloch: I agree.

Q. After you furnished this information to your wife, did your wife return to New York?

A. My wife returned to New York and I had told her that I would be in New York in January on furlough, so she left for New York, knowing that I was going to be there.

Mr. Cohn: Raise your voice a little because Mr. Bloch has some trouble hearing you.

[fol. 596] Q. Did you actually have a furlough in January?

A. I arrived home January 1st, 1945.

Q. January 1st?

A. 1945, yes.

Q. How long was your furlough?

A. It was a 15-day furlough with travel time.

Q. How long was that as a practical matter?

A. About 21 days or 22 days.

Q. When you say you arrived home, where were you then residing, where were you and your wife then living?

A. 266 Stanton Street, in Manhattan.

Q. Here in Manhattan?

A. Right.

Q. After your arrival in New York did there come a time when you saw the defendant Julius Rosenberg?

A. Yes, he came to me one morning and asked me to give him information, specifically anything of value on the atomic bomb, whatever I knew about it.

Q. Now, where did this conversation take place?

A. In my home at 266 Stanton Street.

Q. Did you say this was in the morning?

A. This was in the morning and he told me to write up this information at night, late at night, and he would be back the following morning to pick it up.

Q. About how long after you had arrived in New York did this conversation take place?

A. A few days after I arrived.

[fol. 597] Q. And did he outline to you in any further detail, the information he wanted?

A. He asked me what I was doing out there and I told him I was working on lenses, H. E. lens molds.

Q. That is the lens molds in connection with Dr. Kistiaowski's work that you told us about?

A. That is right.

Q. What else?

A. And he told me to write it up, to write up anything that I knew about the atomic bomb.

Q. Anything else?

A. He gave me a description of the atom bomb.

Q. Did you do any writing at that time?

A. I wrote up the information he wanted that evening. It included sketches on the lens molds and how they were used in experiments.

Q. Anything else?

A. Plus a description of it.

Q. Anything else?

A. Plus a list of scientists who were on the project.



Q. Do you recall the names of any of these scientists?

A. Yes, I gave him the same ones I had given him originally, plus, I gave him a scientist, Baker. I also gave him a scientist by the name of—well, there was one Hans Baker.

Q. Do you know what his field was?

A. Yes, his field was theoretical physics.

[fol. 598] Q. Did you furnish that information?

A. I gave that information, too.

Q. And you say there were some other scientists whose names you do not recall?

A. I don't recall at this moment.

Q. Was this information turned over to Rosenberg?

A. It was, the following morning.

Q. Where?

A. At my home.

Q. At your home?

A. Yes.

Q. Up at 266 Stanton Street?

A. That's right.

Q. Now, you turned that information over to the defendant Rosenberg the following morning in your home, is that right?

A. Yes.

Mr. Cohn: May we approach the bench a moment, your Honor?

(The following took place at the bench out of hearing of the jury:)

Mr. Cohn: We have reached a good stopping place, your Honor.

Mr. Saypol: We are going into a new phase and I don't want to break the continuity. I think it might be advisable if the Court will bear with us to take a recess now.

The Court: Does anybody have any objection?

Mr. E. H. Bloch: (To Mr. Phillips) You have no objection [fol. 599] to a recess for the day because they are going into a new subject?

Mr. Phillips: No.

Mr. Saypol: In that connection, bearing in mind how conscientious your Honor is with respect to maintaining

a continuing calendar, Monday, March 19th, my son gets married in the afternoon.

The Court: Off the record.

(Discussion off the record.)

The Court. (To the Jury) Well it sort of goes against the grain of my Scotch soul, but it looks like we have got to adjourn early today, so we will recess until Monday morning at ten-thirty. I am going to ask you again, I am going to remind you again not to discuss this case with anybody, not to permit anybody to discuss it with you. This case apparently, will arouse a lot of interest in the newspapers. I know that you must, therefore, redouble your efforts not to read anything about it and not to watch anything on television that concerns itself with it, or listen to anything on the radio that concerns itself with it. So we will recess until ten-thirty Monday morning.

I want to compliment you on your record of promptness, and I hope that you keep it up, and I wish all of you a pleasant weekend.

(Adjourned until Monday, March 12, 1951, 10:30 a. m.)

[fol. 600]

New York, March 12, 1951;  
10:30 o'clock a. m.

TRIAL RESUMED

#### RULING ON PRODUCTION OF STATEMENTS

(The following proceedings were had in the absence of the jury and at the bench:)

Mr. E. H. Bloch: If the Court please, at or about 10:15 this morning I was served with photostatic copies of the statements—

The Court: Wait a minute. Just hold that for a moment. Let me have the statements.

Mr. Saypol: I believe they have been turned over to counsel.

The Court: Let me have them. I want to mark them for identification. I want the grand jury minutes too.

Mr. E. H. Bloch: Yes.

The Court: Let me say for the record that I have ex-



where he met Rosenberg, this Bentley incident as to which he said nothing in the course of his first examination. Initially, nobody knows whether an individual is a prospective witness or a prospective defendant. The plan and course of an investigation is not something that is set in advance, but if I have to guide myself in the premises that a witness has to testify to everything that he has told at any time [fol. 607-A] in order to avoid exposing my files, not that I have any fear about it, because I think they are protected, that is why I think it should not be done and I should like to know it.

[fol. 608] The Court: I can't tell you. I just can't tell you, and I will say further that I am ruling on this particular one at this particular time because I have been able to examine them without too much burden on the Court. I think what I have done is not inconsistent with the Alper case. I think I have done what the Circuit Court would want me to do, as indicated by the Krulewich case. It has not been too much of a burden. I will say this, because the jury is absent: My own feeling in the matter is that this man really told a very good, honest, logical story, consistent with what he told here in court. That is my general feeling on the subject.

Mr. Sappol: May I address myself to another subject? I might say this at the bench because I think it ought to be kept confidential among counsel: On Saturday, in the mail, Elitcher received an anonymous threatening letter. Its substance was "Watch out for the time bomb."

Mr. Phillips: Watch out for what?

Mr. Sappol: The time bomb. It has no significance to me, but in the exercise of a policy of caution, I apprised the New York City Police Authorities. I didn't want to put the FBI on a situation like that. I mention it merely [fol. 609] in a precautionary sense so that nobody may say that I overlooked it in the event something should happen.

Mr. E. H. Bloch: I would like to say to the Court in response to Mr. Sappol that the defense is completely in accord with the prosecution in an attempt to track down and convict anybody who would dare intimidate a witness or otherwise obstruct justice. I might say to the Court,

as the Court well knows, these three defendants are held without bail. You have remanded them. They have been in jail for many, many months. I know that Mr. Sappol is not imputing that the defense counsel either directly or indirectly would have anything to do with it. We want to state for the record that we condemn any such tactics now.

Mr. Sappol: Let me say this: Aside from what I consider to be my obligation, I don't want any cross-examination by some astute counsel to point a finger at a witness and say "Isn't it true that the district attorney set a couple of cops on you?"

Mr. E. H. Bloch. No, no.

The Court: Well, I had hoped that we would be able to get through this trial without what occurs sometimes in a trial; that is, threats made to a witness of one nature or another. I shall deal in a very severe manner, Mr. Sappol [fol. 610] pol, with anyone whom you indicate to me you have some evidence on, that he has attempted to intimidate a witness.

Mr. Sappol: I equally so, and I expect that your Honor would. I thought that it was a topic that the Court and counsel should be apprised of.

Mr. E. H. Bloch: Thank you, Mr. Sappol. I might say that if I ever found out about any instance, I would.

The Court: As an officer of the court I would expect you to.

Mark these, Mr. Schaeffer, as exhibits. Mark them as Court exhibits. Mark these grand jury minutes two exhibits, one as indicated here and two as indicated over here.

Mr. Phillips: Exhibits for identification?

The Court: For identification.

(Marked Court's Exhibits I to V for identification.)

Mr. Sappol: One further matter on the record: I would like to introduce Mr. Charles Denison, chief of litigation of the Atomic Energy Commission. I would like to have leave to permit him to sit at the counsel table with me.

Mr. E. H. Bloch: No objection.

[fol. 611] In connection with the introduction of these



statements and the grand jury minutes of Elitcher for identification, it is clear, is it not, your Honor, that if the defense does not desire to utilize them in any way that they are not to be used any further in this trial by any party?

Mr. Saypol: Well, now, that is not a fair ruling.

The Court: Wait a minute.

Mr. Saypol: I thought your Honor was agreeing with that.

The Court: I will rule if they don't use these particular statements to cross-examine further, that you may not use these particular statements either to rehabilitate, so-called, the witness—

Mr. Saypol: Well, am I not in a somewhat unfair position in that respect because ordinarily I couldn't use the statements either to refresh or corroborate a witness in the event of attack, but have made them available to counsel.

The Court: Yes.

Mr. Saypol: Whether they use any or all or none, they out to be available.

The Court: I am sorry. That is not the law. I can't [fol. 612] agree with you, Mr. Saypol. They must make use of them.

Send for the jury.

(The jury enter the jurybox.)

Mr. Saypol: May I address myself to the Court for a moment?

The Court: Yes.

Mr. Saypol: The Court granted permission for Dr. Dodson to sit with me at the counsel table. Dr. Beckerley is here in his place with me. May he sit with me?

The Court: Yes.

Mr. E. H. Bloch: No objection.

The Court: Good morning, ladies and gentlemen. We had a little delay this morning. We had our usual conference at the bench. I hope you will excuse us for it. I appreciate your promptness, however. I understand you have all been very prompt.

Mr. Cohn: We would like Mr. Greenglass back.

DAVID GREENGLASS, resumed the stand.

The Court: Now, Mr. Greenglass, will you please remember to speak up?

The Witness: I will.

Direct examination continued.

By Mr. Cohn:

Q. Now, Mr. Greenglass, I think that on Friday afternoon before we adjourned, we were at the point where [fol. 613] Rosenberg had returned to your apartment to get this information on the atom bomb that he had asked you to write down; is that correct?

A. That is correct.

Q. Will you tell us again—first of all, did you in fact furnish him with written information concerning the atom bomb?

A. I did.

Q. Will you tell us just what information you furnished him with on that day?

A. I gave him a list of scientists who worked on the project. I gave him some sketches of flat type lens molds, and I gave him some possible recruits.

Q. What kind of recruits?

A. For Soviet espionage.

Mr. E. H. Bloch: I move to strike out the latter part of his answer.

The Court: I will strike that out and permit you to tell us what Mr. Rosenberg said to you about recruiting scientists or recruiting anybody to help. What were his words, in substance?

The Witness: He said he wanted a list of people who seemed sympathetic with Communism and would help furnish information to the Russians.

The Court: Very well.

Q. And you furnished him with such a list; is that correct [fol. 614] rect?

A. I did.

Q. Now I want to come specifically to these sketches

you told us about of this lens. Exactly do you remember how many sketches you gave him?

A. I gave him a number of sketches, showing various types of lens molds.

Q. Was this that lens mold in connection with Dr. Caskey, that you told us about on Friday afternoon, which had been constructed at the shop, the Los Alamos shop in which you were working?

A. That was the same lens mold.

Q. Now, did you give Rosenberg a sketch of the lens mold; did you tell him how the lens mold was used?

Mr. E. H. Bloch: If the Court please, I am going to ask Mr. Cohn not to be leading at this point.

Q. Tell us exactly what you gave Rosenberg with reference to the lens mold.

A. I gave him a sketch of the lens mold. I marked them, A, B, C, the parts of the mold, and I defined what these markings meant.

Q. Where were these definitions contained, on the same sheet of paper?

A. On a separate sheet of paper.

Q. The sketch was on one sheet and the description on another sheet?

A. That is right.

Mr. Cohn: May this be marked for identification, your [fol. 615] Honor?

(Marked Government's Exhibit 2 for identification.)

Q. Now, Mr. Greenglass, have you, at our request, prepared a copy of the sketch of the lens mold which you furnished to Rosenberg on that day in January?

A. I did.

Q. Would you examine Government's Exhibit 2 for identification (handing) and tell me if that is the sketch which you prepared.

A. That is the sketch that I prepared.

Mr. Cohn: We offer it in evidence, your Honor.

Mr. E. H. Bloch: Before I make any objection, may I have a voir dire question here?

The Court: Go ahead.

Mr. E. H. Bloch: When did you prepare this?

The Witness: During this trial, yesterday.

Mr. E. H. Bloch: I object to its introduction upon the ground it is incompetent, irrelevant and immaterial. The witness is here. He testified orally to things. This is not a proper way of corroborating the witness. In fact, it is improper, I submit, to corroborate in this way.

Mr. Cohn: Well, if your Honor wants to hear me on that, I think the jury is certainly entitled to see what the witness has testified he gave to the defendant in this case, what information concerning the atom bomb and things in [fol. 616] connection with it he gave to the defendant in this case.

The Court: In other words, you put this in the same category, as I understand it, of chart evidence. After the witness testifies to something, a chart may be produced for the purpose of enlightening the jury or making it easier for the jury to understand. You are not introducing this as the exhibit that was turned over.

Mr. Cohn: Oh, no, not at all, your Honor. In fact, I will ask Mr. Greenglass—

By Mr. Cohn:

Q. When did you last see the very sketch which you turned over to Rosenberg?

A. In January, 1945.

Q. When you handed it to Rosenberg?

A. That is right.

Q. And you have not seen it since then?

A. No.

The Court: Objection overruled.

Mr. E. H. Bloch: Before your Honor rules, may I ask one more question along your Honor's line of thinking, if I may?

The Court: Go ahead.

Mr. E. H. Bloch: After looking at this Government's Exhibit 2 for identification, are you saying that that paper that you have in your hand represents a true copy of the [fol. 617] sketch that you turned over to Rosenberg?



The Witness: To the best of my recollection at this time, yes.

Mr. E. H. Bloch: Well, then, if your Honor please, I renew my objection, because I submit that this is not analogous to introducing a chart in evidence. A chart is introduced for the purpose of elucidating the jury on matters which may be complex, and it is a sort of over-all picture by which the jury may be enabled to follow certain details. Here, this exhibit is being introduced because it purports, according to this witness, to be a true copy of what he allegedly turned over to Rosenberg. Now, I submit that is a violation of the rule against corroborating the witness by extrinsic evidence while he is on the stand, and I believe it is improper.

Mr. Saypol: May I address myself to the question? I submit, if the Court please, that counsel misunderstands the objective in utilizing this exhibit. It is based entirely on the secondary evidence rule. The actual sketch, obviously, is not available, as the witness has testified. Certainly there may be made available for the use of the jury, in conjunction with the witness's testimony, a recently prepared replica which, as he has testified, to the best of his [fol. 618] recollection is a replica of that which he furnished to the defendant.

Mr. E. H. Bloch: As far as the best evidence rule is concerned, your Honor, I could see the cogency of Mr. Saypol's argument if it would be the contention of the prosecution that this document, which they now attempt to introduce in evidence, was made at or contemporaneously with or prior to the time.

The Court: What you are saying does not go to the basic question of whether or not a foundation has been laid for its introduction. What you are saying goes to the weight to be given to the document.

Mr. E. H. Bloch: I think it goes to both, your Honor. I think it goes to the fact that no proper foundation has been laid under the present—

The Court: I will receive it. Objection overruled.

Mr. E. H. Bloch: I respectfully except.

(Marked Government's Exhibit 2 in evidence.)

By Mr. Cohn:

Q. Now, Mr. Greenglass, while it is being marked, I might ask you—

The Court: Just a moment. Let it be marked. Government's Exhibit 2 in evidence, Mr. Greenglass; does that—

Mr. E. H. Bloch: I am sorry, Mr. Cohn, but now I would like to look at it a little more carefully so I may be enabled to follow the witness intelligently.

Mr. Cohn: Certainly, Mr. Bloch (handing).

Mr. E. H. Bloch: Thank you very much. All right.

Q. Addressing yourself to Government's Exhibit 2 in evidence, Mr. Greenglass, does that exhibit contain certain letters, "A", "B", "C"?

A. They do.

Q. Now, what do those letters have reference to? Do they have reference to this other paper?

A. Yes, they have reference to another paper, where I put down the meaning of these letters.

Q. Would you tell us now, as best as you remember it, exactly what descriptive language was contained on this piece of paper you furnished Rosenberg along with this sketch?

Mr. E. H. Bloch: That is objected to, your Honor, on the same grounds that I objected to the introduction of this document.

The Court: Overruled.

Mr. E. H. Bloch: I respectfully except.

A. "A" refers to the curve of the lens; "B" is the [fol. 620] frame; "C" shows approximately how wide it is.

The Court: All right, now you had better give us that slowly so we can all understand it.

"A" refers to what?

The Witness: The curve of the lens, the outside curve; "B" to the frame; and "C" to the width. It is a four-leaf clover design like; it looks something similar.

Mr. E. H. Bloch: We can't hear the witness, your Honor, I am sorry.



The Witness: It has four curves on it, and these—it is hollow in the center and it was used to pour "H. E." into it.

Q. What do — mean by "H. E."?

A. High explosive. It then took on the shape, the H. E. took on the shape of the mold and the mold was removed and you had a high explosive lens.

Mr. Cohn: Your Honor, may I pass it to the jury?

The Court: Yes.

(Government's Exhibit 2 in evidence passed to the jury.)

Q. I think you have already told us that this lens, mold, along with other things constructed in your shop, were used in connection with experimentation on the atomic bomb; is that correct?

A. They were.

Q. By the way, did you have any conversation with Rosenberg [fol. 621] concerning the writing on the descriptive material?

A. I did. My wife—

Mr. E. H. Bloch: Will you fix the time, please?

Q. Will you tell us just when this conversation took place, in relation to the time you turned over the material?

A. It took place in the morning after I had written this information out. Julius came to the house and received this information, and my wife, in passing remark that the handwriting would be bad and would need interpretation, and Julius said there was nothing to worry about as Ethel would type it up, retype the information.

The Court: Excuse me a moment. May I have that answer reread?

(Last question and answer read.)

Q. Did you have any further conversation with Rosenberg on the occasion when you turned over this material?

A. Not at—he asked me to come to dinner, my wife and myself, for an evening a few days later—I can't remember—a day or two later.

Q. At his home?

A. Yes, at his home.

Q. Did you accept the dinner invitation?

A. I did.

Q. Did there come a time when you and your wife did in fact go to Rosenberg's home in response to the dinner invitation?

A. We did.

Q. About how soon after this meeting at which you [fol. 622] turned over the material?

A. It was a day or two later.

Q. Now, where did Rosenberg live at that time?

A. 10 Monroe Street, in Knickerbocker Village.

Q. In Knickerbocker Village?

A. Yes.

Q. Do you remember what time you arrived at his apartment?

A. I would say it was about 7 o'clock or so.

Q. Now, I would like you to tell the Court and jury exactly what happened from the time you entered the apartment on that night, until the time you left? By that I mean, tell us who was there, tell us what was said and by whom?

The Court: What was the date, did you say?

Mr. Cohn: I believe the date was fixed, your Honor, as two or three days or a day or two—two or three days after the meeting in Greenglass' apartment, at which he turned over the information to Rosenberg.

The Court: Very well.

A. When I got to the apartment with my wife, there was Julius and Ethel Rosenberg and a woman by the name of Ann Sidorovich.

Mr. E. H. Bloch: What was that name?

Q. Just stop there for a moment. What did you say that name was?

A. Ann Sidorovich.

Mr. Cohn: May we have this marked for identification, [fol. 623] please?

(Marked Government's Exhibit 3 for identification.)

Q. Now, had you ever met Ann Sidorovich before?

A. I had never met her before, no.



Q. Did you know any members of her family?

A. I knew her husband.

Q. What was his name?

A. Mike Sidorovich.

Q. How long a period of time did you know him?

A. I knew him for some years.

Q. I would like you to examine now Government's Exhibit 3 for identification and tell me if you recognize the people on that picture?

A. This is Mike and Ann Sidorovich.

Mr. Cohn: We offer it in evidence, your Honor. May it be received?

(Government's Exhibit 3 previously marked for identification received in evidence.)

Mr. Cohn: May I exhibit that to the jury, your Honor?

The Court: Yes.

(Government's Exhibit 3 shown to the jury.)

Q. Now, keep your voice up, Mr. Greenglass, and tell us—you have told us who was present, Mr. and Mrs. Rosenberg and this woman, Ann Sidorovich; now, would you tell us exactly what happened on that evening, exactly [fol. 624] what was said and by whom?

A. Well, the early part of the evening we just sat around and spoke socially with Ann and the Rosenbergs, and then Ann Sidorovich left. It was at this point that Julius said that this is the woman who he thinks would come out to see us, who will come out to see us at Albuquerque, to receive information from myself.

Q. What kind of information?

A. On the atomic bomb. And she would probably be the one to come out to see us. We then ate supper and after supper there was more conversation, and during supper—and during this conversation there was a tentative plan brought forth, to the effect that my wife would come out to Albuquerque to stay with me, and when this woman, Ann or somebody would come out to see us, they would go to Denver, and in a motion picture theater they would meet and exchange purses, my wife's purse having this informa-

tion from Los Alamos, and of course, that is the way the information would be transmitted.

Q. Now, was anything said about the reason for Ann Sidorovich being present at the Rosenberg's home on that particular night when you were there?

A. Yes, they wanted us to meet this Ann Sidorovich, so that we would know what she looked like; and that brought up a point, what if she does not come?

[fol. 625] Q. You mean, there was a possibility that somebody else would come?

A. That's right. So Julius said to my wife, "Well, I give you something so that you will be able to identify the person that does come".

Q. In other words, if Ann Sidorovich would come, she was up in the apartment that night, you were up in the apartment that night; she knew what you looked like; you knew what she looked like; but if somebody else would come, this would be mutual identification; is that right?

Mr. E. H. Bloch: Mr. Cohn, please don't repeat the answer.

Mr. Cohn: If I do so, your Honor, it is for the purpose of clarity. Strange names are coming in. However, I won't do it.

Mr. E. H. Bloch: You know why I don't want you to do it, because sometimes re-emphasis—

Mr. Cohn: I will settle it by saying that I won't do it, your Honor.

May we have the last from the witness?

(Last answer read.)

Q. All right, go ahead from there.

A. Well, Rosenberg and my wife and Ethel went into the kitchen and I was in the living room; and then a little while later, after they had been there about five minutes or so, they came out and my wife had in her hand a Jello [fol. 626] box side.

Mr. E. H. Bloch: Side?

Mr. Cohn: Side.

Mr. E. H. Bloch: S-i-d-e?

Mr. Cohn: That's right.



By Mr. Cohn:

Q. Who said this?

A. My wife had remarked to Ethel that she looked tired.

Q. Ethel looked tired?

A. And Ethel remarked that she was tired between the child and staying up late at night, keeping—typing over notes that Julius had brought her—this was on espionage.

Mr. E. H. Bloch: I move to strike out the last.

The Court: Did she say that?

The Witness. She said "in this work". She also stated that she didn't mind it so long as Julius was doing what he wanted to do.

Q. During this evening, was any reference made by either of the Rosenbergs, to the material which you had turned over to Julius a couple of days before?

A. Well, we discussed the lenses—we generally talked shop about what I had done at Los Alamos, and we discussed lenses all during this evening, and, you know, whatever was going on at Los Alamos, scientists—  
[fol. 633] Q. Was anything said about—

A. Scientists, of that nature; things of that nature; and he said that he would like me to meet somebody who would talk to me more about lenses.

Q. Did he tell you who this person he wanted you to meet was?

A. He said it was a Russian he wanted me to meet.

Q. Did he give you any further identification on that night?

A. No.

Q. Now, after the conclusion of this evening, did you return home?

A. At the end of this evening I returned home.

Q. About what time do you think you left Rosenberg's apartment?

A. Oh, it was twelve or maybe possibly later.

Q. Did you and your wife have any further conversation about anything that had transpired when you returned home?

A. Well, she showed me the piece, the Jello side, the Jello box side, and she put it in her wallet.

Q. In her wallet?

A. That's right.

Mr. E. H. Bloch: If the Court please, I am objecting to any conversation between this witness and his wife outside of the presence of the defendant Rosenberg and the other defendants, and likewise any acts that may have taken place, in which the Rosenbergs weren't present. I [fol. 634] just want to reserve objection for the record.

The Court: Very well. You know the ruling; you know the reason for my ruling.

Mr Cohn: Of course, your Honor, I offer them as statements by co-conspirators in furtherance of the conspiracy.

Q. Now, did anything further come of Julius's statement that he wanted you to discuss this lens with the Russian?

A. Yes.

Q. Tell us.

A. A few nights later—well an appointment was made for me to meet a Russian on First Avenue, between 42nd and 59th Streets—it was in that area.

Q. Who made the appointment?

A. Julius made the appointment.

Q. When was it in relation to the dinner meeting in January?

A. It was a few days after. I took my father-in-law's car and drove up there. It was about eleven-thirty at night. I remember coming up the street. It was quite dark and there was a lighted window. I passed that in parking—it was a saloon—I parked up the block from it, and in a little while Julius came around the corner, looked into the car, saw who I was; said, "I will be right back"; brought back a man; introduced the man to me by first name, that I don't recall at this time, and the man got into the car [fol. 635] with me. Julius stayed right there and we drove around—

Q. Let me see if I understand it. When you say "Julius stayed right there", was Julius in the car or not?

A. He was not in the car.

Q. He merely effected the introduction?

A. He just introduced me to him.

Q. And remained on the street?



A. And remained on the street.

Q. Where did you drive?

A. Well, we drove all over that area. He just told me to keep driving and he asked questions about lenses.

Q. Did he ask you specifically about this high explosive lens?

A. He did. He asked about high explosive lenses and he wanted to know pertinent information, type of H. E. used.

Mr. E. H. Bloch: I move to strike out "pertinent" as a conclusion.

The Court: Strike out "pertinent". Tell us what he wanted to know.

The Witness: He wanted to know the formula of the curve on the lens; he wanted to know the H. E. used, and means of detonation; and I drove around—

The Court: And what, means of detonation?

The Witness: That's right; and I drove around, and [fol. 636] being very busy with my driving, I didn't pay too much attention to what he was saying, but the things he wanted to know, I had no direct knowledge of and I couldn't give a positive answer.

Q. Now, about how long did this drive with the Russian last?

A. About twenty minutes or so.

Q. Where did it terminate?

A. At the same place that it originated.

Q. Did you see Julius any more on that night?

A. Yes, he came back—I mean, he was around there, and the Russian got out and they went off together, and I drove back home.

Q. Did Julius give you any instructions?

Mr. E. H. Bloch: Now, if the Court please, just a second. I move to strike out the characterization of the man that he met, especially in the last answer, as "Russian".

The Court: That is denied. The testimony, as I understand it, is that Julius said he wanted to introduce him to a Russian.

Mr. E. H. Bloch: Yes, but whatever the defendant Rosenberg may have said doesn't substitute for the fact, which

I contend the prosecution must prove, namely, that this man was a Russian or a Russian subject or citizen.

The Court: We will understand that when he said "a [fol. 637] Russian" we will accept that the Russian that he is characterizing as such was the man who Mr. Rosenberg had characterized as "a Russian".

By Mr. Cohn:

Q. Did Julius give you any instructions as to where you should go and what you should do after you concluded this drive with the man who you described as "a Russian"?

A. He said, "Go home now. I will stay with him". He was going to have something to eat with him.

Q. Did you in fact return home?

A. I went home.

Q. Did you tell your wife where you had been?

A. Yes, I told my wife where I had been.

Q. Now I think you told us you arrived in New York on this furlough on January 1, 1945; is that correct?

A. That is correct.

Q. About when did you leave New York and return to Los Alamos?

A. About the 20th.

Q. Did your wife go with you?

A. She did not go with me.

Q. Did there come a time when she joined you at Albuquerque?

A. She did.

Q. Will you tell us when that was?

A. That was in the springtime, it was about March or April—early—late March, early April, I think.

Q. Of 1945?

A. Of 1945.

[fol. 638] Q. Where did your wife live when she got out to Albuquerque?

A. Well, at first she stayed in a fellow G. I.'s apartment, a man by the name of Delman. He and his wife had gone east on furlough. Then she stayed at a fellow by the name of Spindel's apartment. Then we had our own place.



Q. Now, when you say you had your own place, was it a house, an apartment, or what?

A. It was an apartment at 209 North High Street.

Q. 209 North High Street. That was in Albuquerque?

A. In Albuquerque.

Q. Were you able to go home every night?

A. No, I wasn't.

Q. When did you go to the apartment?

A. Well, usually Saturday night. I would start down and get there sometime Saturday evening.

Q. When would you return to Los Alamos?

A. Sunday—I mean Monday, early in the morning.

Q. Were you in this apartment—was your wife in this apartment, were you in there over the weekends during the month of May and during the month of June, in 1945?

A. I was.

Q. Now, Mr. Greenglass, did Ann Sidorovich ever come out to see you?

A. No, she didn't.

Q. Did somebody else come out to see you?

A. Yes.

[fol. 639] Q. Was it a man or woman?

A. It was a man.

Q. And when was this visit?

A. First Sunday in June, 1945.

Q. Did you at that time know the name of this man?

A. I did not.

Q. Do you now know his name?

A. Yes, I do.

Q. What is it?

A. Harry Gold.

Mr. E. H. Bloch: Your Honor, again I would like to state for the record that I am objecting to anything that happened out in New Mexico, outside the presence of the defendant Rosenberg, and more specifically, upon the ground that there is nothing in this witness's previous testimony to lay the foundation for the introduction of this evidence, reflected by the last question or by the last two questions.

The Court: That last objection is very vague, but there

is just no question in my mind as to the competence of this evidence, so I will overrule your objection.

Mr. E. H. Bloch: I respectfully except.

(Government's Exhibit 5 marked for identification.)

Q. Do you recognize this picture, Mr. Greenglass (showing)?

A. Yes, I do.

Q. Who is that?

A. That is Harry Gold.

Mr. Cohn: We offer it in evidence, your Honor.

(Government's Exhibit 5 for identification received in [fol. 640] evidence.)

The Court: Excuse me. Where did he come to see you, in Albuquerque?

The Witness: In Albuquerque.

Mr. Cohen: Would your Honor want to take the morning recess at this point?

The Court: Yes. We will take a recess at this point.

(Short recess.)

(Jury in box.)

Mr. E. H. Bloch: If the Court please, may I ask whether the prosecution would have any objection to offering for identification, the remaining portions of the Jello box, from which the witness cut the sides?

Mr. Cohn: It has already been done, your Honor.

The Court: It has already been done.

Mr. E. H. Bloch: It is marked?

Mr. Cohn: Exhibit 4 for identification and the two parts have been received in evidence.

Mr. E. H. Bloch: 4-A and 4-B. I was a little confused about that. Thank you very much.

Mr. Cohn: Did you want to examine it?

Mr. E. H. Bloch: No, thank you very much.

[fol. 641] Q. When did you say it was that Harry Gold came to your house, Mr. Greenglass?

A. It was the third Sunday in June 1945.



Q. What time of day?

A. It was in the morning.

Q. Who was home?

A. I and my wife were home.

Q. Would you tell us exactly what happened from the first minute you saw Gold?

Mr. E. H. Bloch: My objection still stands, your Honor. The Court: Yes, overruled.

Mr. E. H. Bloch: Exception.

A. There was a knock on the door and I opened it. We had just completed eating breakfast, and there was a man standing in the hallway who asked if I were Mr. Green-glass, and I said yes. He stepped through the door and he said, "Julius sent me," and I said "oh," and walked to my wife's purse, took out the wallet and took out the matched part of the Jello box.

Q. That was Government's Exhibit 4-A, is that correct?

A. The Jello box.

Q. The piece you retained that night?

A. Yes.

Q. After you produced that did Gold do anything?

A. He produced his piece and we checked them and they fitted, and the identification was made.

Q. In other words, he had—

[fol. 642] A. He had the other part of the box.

Q. And you had last seen that in Rosenberg's apartment that night in January, 1945?

A. That is right.

Q. Now, after mutual identification was effected, did you have any conversation with Harry Gold?

A. Yes. I offered him something to eat and he said he had already eaten. He just wanted to know if I had any information and I said, "I have some but I will have to write it up. If you come back in the afternoon I will give it to you." I started to tell him the story about one of the people I put into the report, and he—

Q. Who was one of the people you put into the report?

A. A fellow by the name of Bederson, and he cut me short.

Q. What kind of person was he? Why did you put him in the report?

A. Well, I considered him good material for recruiting into espionage work.

Mr. E. H. Bloch: I move to strike out the part of the answer with respect particularly to the words "espionage work" as reflecting only the operation of this witness's mind.

The Court: No, I will overrule it. The witness has already testified that Mr. Rosenberg had asked him on a previous occasion to send such names of anybody whom [fol. 643] he considered to be a good recruit, and I am overruling the objection.

Mr. E. H. Bloch: Then, if the Court please, may I ask Mr. Cohn to clarify what report this witness is referring to?

The Court: Yes.

Mr. Cohn: I will be glad to do that, your Honor.

The Court: Yes.

Q. In which report had you mentioned the name which you discussed with Gold?

A. I mentioned it in that particular report that I gave him that day.

Q. The report you gave Gold later that day?

A. Yes.

Q. You discussed the name before you embodied it in the report?

A. That is right.

Q. Tell us just what was said by you and Gold.

Mr. E. H. Bloch: When was this? Morning or afternoon?

Q. Mr. Bloch wants to know when was it?

A. This particular time was the morning. He cut me short on the business with Bederson. He said he didn't want to know about it and he left and I got to work on the report.

Q. Where did you work on the report?

A. Right in the livingroom, my combination livingroom [fol. 644] and bedroom there.

Q. Tell us exactly what you did.

A. I got out some 8 by 10 ruled white line paper, and I drew some sketches of a lens mold and how they are set up in an experiment, and I gave descriptive material that gives a description of this experiment.

Q. Was this another step in the same experiment on atomic energy concerning which you had given a sketch to Rosenberg?

A. That is right, and I also gave him a list of possible recruits for espionage.

Mr. E. H. Bloch: I move to strike out the last two words, "recruits for espionage."

The Court: Overruled.

Mr. E. H. Bloch: I respectfully except. Of course, I don't like to be popping up and down, your Honor. I want to make it clear that I am objecting to this entire line of testimony with respect to this incident between the witness and Gold in New Mexico as not binding upon the defendant.

The Court: Overruled.

The Witness: I gave this list of names and also sketches and descriptive material.

Q. What time of day was it that you gave this material to Harry Gold?

A. It was later in the afternoon. He came back about [fol. 645] 2.30 or 3 o'clock and picked it up.

Q. Did all these sketches and descriptive material concern experimentation on the atomic bomb?

A. That is right.

Q. Tell us exactly what happened when he came back at 2.30?

A. Well, when he came back to the house he came in and I gave him the report in an envelope and he gave me an envelope which I felt and realized there was money in it and I put it in my pocket.

Q. Did you examine the money at that point?

A. No, I didn't.

Q. Did you have any discussion with Gold about the money?

A. Yes, I did. He said, "Will it be enough?" And I said, "Well, it will be plenty for the present." And he

said, "You need it," and we went into a side discussion about the fact that my wife had a miscarriage earlier in the spring, and he said, "Well, I will see what I can do about getting some more money for you."

Q. Was there any further discussion with Gold?

A. Well, he wanted to leave immediately and I said, "Wait, and we will go down with you," and he waited a little while. We went down, and we went around by a back road and we dropped him in front of the USO. We [fol. 646] went into the USO, and he went on his way. As soon as he had gone down the street my wife and myself looked around and we came out again and back to the apartment and counted the money.

Q. How much was it?

A. We found it to be \$500.

Q. What did you do with the money?

A. I gave it to my wife.

Q. Going back to these sketches which you gave to Harry Gold, do you remember just what sketches you gave to Harry Gold concerning a high explosives lens mold on that occasion?

A. I gave sketches relating to the experiment set up; one showing a flat—the face of the flat type lens mold.

Q. Face view?

A. Face view of the flat type lens mold.

Q. Have you prepared, at our request, a sketch of this face view?

A. I have.

Mr. Cohn: Let this be marked for identification.

(Marked Government's Exhibit 6 for identification.)

Q. Would you examine Government's Exhibit 6 for identification? By the way, you prepared that on June 15, 1950, is that correct?

A. I did.

The Court: Well, 6 for identification, I take it, is a replica of—

[fol. 647] Mr. Cohn: Well, 6 for identification was prepared on June 15, 1950, your Honor, last year.

The Court: Oh, I see.



Q. In answer to his Honor's question is this to the best of your recollection an accurate replica of the face view which you gave Harry Gold in June, 1945?

A. That is right.

Mr. Cohn: I will now offer it in evidence, your Honor.

Mr. E. H. Bloch: Before ruling, may I have one question on the voir dire?

The Court: Go ahead.

By Mr. Bloch:

Q. When you made this sketch on June 15, 1950, and I am referring now to Government's Exhibit 6 for identification, did you rely solely on your memory?

A. I did.

Mr. E. H. Bloch: Now if the Court please, I am objecting to the introduction of this exhibit in evidence upon the same ground which I used in connection with the introduction of one of the previous exhibits. I think it is 2, if I am not mistaken.

The Court: I am admitting it. The weight to be given to it will be entirely up to the jury, but I believe a foundation has been laid for it, and it is being done for the purpose [fol. 648] of permitting the jury to visualize what was turned over, and only in so far as that; it is not being introduced as the document which was given to Gold because, for apparent reasons, the Government couldn't introduce that at this time.

Mr. E. H. Bloch: I respectfully except.

The Court: I will admit it. The weight to be given to it will simply be a question for the jury.

Mr. E. H. Bloch: I respectfully except.

(Government's Exhibit 6 for identification received in evidence.)

The Court: Is this to your present knowledge an exact replica of the sketch which you turned over even to the extent of the comments on the side?

The Witness: It is.

Mr. Cohn: Your Honor, Mr. Saypol reminds me that I did not show the jury the picture of Mr. Gold (handing to jury).

[fol. 649] By Mr. Cohn:

Q. Will you address yourself to Government's Exhibit 6 in evidence and tell the jury what that represents?

A. I showed a high explosive lens mold. I showed the way it would look with this high explosive in it with the detonators on, and I showed the steel tube in the middle which would be exploded by this lens mold.

Q. Now, did you prepare on that Sunday in June, 1945 and give to Harry Gold on that same day, any other sketches concerning this high explosive lens mold for atomic energy?

A. I showed him a schematic view of the lens mold set-up in an experiment.

Q. Now, have you similarly prepared for us a replica as you remember it, of the sketch which you gave Harry Gold on that day?

A. I did.

By the Court:

Q. What do you call this sketch, a schematic view of it?

A. Yes. Well, none of those are to scale. So they are all schematic.

Q. What is the difference between 7 for identification, now being marked, and 6?

A. Well, this shows an experiment.

Q. Actually, the mold being used in an experiment?

A. That is right. The set-up.

(Market Government's Exhibit 7 for identification.)

[fol. 650] By Mr. Cohn:

Q. Is this the sketch Mr. Greenglass (handing to witness)

A. Yes, it is.

Mr. Cohn: We offer it, your Honor.

Mr. E. H. Bloch: May I ask a question?

Mr. Cohn: Surely.

Mr. E. H. Bloch: To protect the record.

By Mr. E. H. Bloch:

Q. Mr. Greenglass, in connection with Government's Exhibit 7 for identification, can you tell us when you prepared this?

A. I prepared it during this trial.

Q. When specifically, if you remember?

A. Yesterday.

Q. And did you rely solely upon your memory in preparing this?

A. I did.

Mr. E. H. Bloch: Now, if the Court please, I make the same objection upon the same grounds heretofore urged.

The Court: Same ruling.

Mr. E. H. Bloch: (Continuing) To the introduction of Exhibits 2 and 6.

The Court: Same ruling.

Mr. E. H. Bloch: I respectfully except.

(Marked Government's Exhibit 7.)

[fol. 651] By the Court:

Q. Now, the comments on the bottom of No. 7: Were they the same comments you had on the sketch?

A. No. That is just to identify it.

The Court: Oh, well. No, no comments.

By Mr. Cohn:

Q. In other words, that is to describe this, but your recollection is you did not put such description on the same piece of paper when you gave it to Gold?

A. No.

Mr. Cohn: We have no objection at all if that description is cut off, your Honor.

Mr. E. H. Bloch: I can't even answer that, Mr. Cohn, because I am objecting to the introduction of the document.

Mr. Cohn: You don't even want to see it cut off.

Q. Now, you had better look at this in altered form, Mr. Greenglass. Is this the sketch?

A. That is the sketch.

Q. Does this sketch, Government's Exhibit 7 in evidence similarly have letters such as the first one, A, B, C and D, and so forth?

A. Yes.

Q. What do those letters refer to?

A. They refer to the parts of this sketch.

Q. Were letters such as that on the sketch which you [fol. 652] gave to Gold?

A. That is right.

Q. Did those letters refer to descriptive material?

A. They did.

Q. Where was this descriptive material?

A. On a separate sheet of paper.

Q. Did you give that descriptive material to Gold?

A. I did.

Q. Will you tell us the language you used on the separate piece of paper in describing this exhibit to Harry Gold?

Mr. E. H. Bloch: I am sorry. I would like it to be clarified, has this exhibit already been marked in evidence?

The Court: Yes.

Mr. E. H. Bloch: May I ask that I see it for just a moment so I can follow this?

(Mr. Cohn hands to Mr. E. H. Bloch.)

Mr. E. H. Bloch: May I say at this time, your Honor, in view of the last question and in view of the witness' previous testimony, I object to the introduction of this last exhibit and ask that it be stricken from the record, and I likewise ask that Government's Exhibits 2 and 6 be stricken from the record upon the same ground. The exhibit now in evidence, referring to 7, I believe, as well as 6 and 2, have no meaning without the descriptive material [fol. 653] which this witness alleged or states that he gave to Gold at the time he turned over these exhibits. The gist of my argument is that in addition to the other objections that I urged, that this represents a truncated, distorted, abortive picture of what the Government is trying to show



and what this witness, I think, is trying to respond to in answer to Mr. Cohn's questions. I hope that I am making myself clear.

The Court: You are making yourself clear, yes, but I don't agree with you at all. I believe that he is describing verbally the meaning of the lettering on the exhibits. What you are saying is that he must produce a paper that describes it. He is describing it verbally. I overrule your objection.

Mr. E. H. Bloch: I respectfully except.

Mr. Cohn: Obviously, your Honor, we could have had it written on paper, but the witness' words speak for themselves. We wanted the Court and jury to see what the thing looked like, the thing he was addressing himself to.

The Court: Yes.

By Mr. Cohn:

Q. Now, would you tell us just what you wrote on this other sheet of paper to describe this exhibit and the letters contained thereon?

[fol. 654] Mr. E. H. Bloch: That is objected to, your Honor.

The Court: Overruled.

Mr. E. H. Bloch: I respectfully except.

A. "A" is the light source which projects a light through this tube "E," which shows a camera set up to take a picture of this light source. Around the tube it is a cross-section of the high explosive lens "C" and a detonator "B" showing where it is detonated, and the course is that when the lens is detonated it collapses the tube, implodes the tube, and the camera through the lens "F" and the film "D" shows a picture of the implosion.

Q. By the way, Mr. Greenglass, I think you have already told us you knew at all times that all of these sketches and descriptive material were secret?

A. I did.

By the Court:

Q. Were there constant experiments going on?

A. Constant.

Q. And the sketches in 6 and 7 were what were considered an advance on these sketches marked as Government's Exhibit 2?

A. Yes.

Q. Well, let us eliminate the word "Advance"; they were just another step?

A. That is right.

Mr. Cohn: In line with your Honor's explanation, we have now arrived at the point where we have the secured permission of the Court to interrupt the testimony of Mr. [fol. 655] Greenglass and put someone on the stand, concerning these other matters.

Mr. Sappol: Your Honor's remarks were quite pertinent.

Mr. E. H. Bloch: I object to Mr. Sappol's statement that your Honor's remarks were quite pertinent. I think the Court itself spontaneously realized that there was a question in your Honor's mind which has not been proved by any evidence—

The Court: No, I didn't realize anything of the kind. Please don't comment on what I have said.

Mr. E. H. Bloch: Well, I am objecting to Mr. Sappol's statement.

The Court: We will strike Mr. Sappol's statement and strike yours, too.

(Witness Greenglass temporarily excused.)

[fol. 656] WALTER S. KOSKI, called as a witness on behalf of the Government, being first duly sworn, testified as follows:

Direct examination.

By Mr. Sappol:

Q. Dr. Koski, what is your profession?

A. Physical chemistry.

Q. You have heard us suggest to witnesses that they speak up loudly and to keep you in the same category, we will ask you to.

You say you are a physical chemist? Is that what you said?

A. I am.

Q. Are you engaged in that capacity now?

A. I am.

Q. Where are you so engaged?

A. Johns Hopkins University.

Q. Exactly in what capacity are you so engaged at John Hopkins?

A. I am associate professor of physical chemistry.

Q. Collaterally, do you have any other association in your profession?

A. I am consultant at the Brookhaven National Laboratories.

Q. Consultant in what?

A. I am corroborating in a program which has as its objective to measure certain properties of radio-active nuclei.

Q. Nuclear chemistry?

A. Nuclear chemistry or nuclear physics.

[fol. 657] Q. What activity so far as is related to your field is conducted at Brookhaven?

A. Nuclear chemistry.

Q. Is that something related to some sort of measurements?

A. It relates to the measurement of certain properties of radio-active nuclei.

Q. What has been your education?

A. I have a Ph. D. in physical chemistry.

Q. Is that from Johns Hopkins, too?

A. It is.

Q. When?

A. June, 1942.

Q. What was your employment from 1942 to 1944?

A. I was a research chemist at the Hercules Powder Company.

Q. In 1944 did you become associated with the United States Government?

A. I did.

Q. In what capacity?

A. As an engineer at the Los Alamos Scientific Laboratories.

Q. How long did you continue your work there?

A. Up to about September, 1947.

Q. That is about the time that you became associate professor of chemistry at Johns Hopkins?

A. That was.

Q. That was also the time when you took on this retainer as consultant at Brookhaven Laboratories?

A. It was.

Q. That is the Brookhaven National Laboratories, to be exact?

A. Correct.

[fol. 658] Q. Referring now to this period between 1944 and 1947 when you were at Los Alamos, can you tell me generally what instructions were issued to you, if any, concerning the character of the work that was being done there, what your position was to be in respect to publication?

Mr. A. Bloch: That is objected to on the ground that it is not binding on the defendant and it is heresy.

The Court: Overruled.

Mr. A. Bloch: And therefore incompetent, irrelevant and immaterial.

The Court: Overruled.

Mr. A. Bloch: Exception.

A. We were informed that all work done at Los Alamos was of a highly classified nature.

Q. When you say "classified" do you mean that it was restricted or secret?

A. Secret.

Q. Was that knowledge imparted to you in the form of instructions on one or more occasions?

A. It was imparted to us verbally and by written material.

Q. Is that the atmosphere that prevailed in connection with all of the work that was conducted there?



Mr. E. H. Bloch: I object to the word "atmosphere."  
[fol. 659] The Court: All right. Strike it out.

Q. Prior to your arrival at Los Alamos in 1944, did you have knowledge of the work that was going on there?

A. I did not.

Q. Did there come a time when you learned the nature of the activities?

A. There did.

Q. (Continuing) That were being conducted there?

A. There did.

Q. Just reverting for a moment, Doctor, remember, we were discussing secrecy and restriction at Los Alamos: Have you ever seen that before (showing paper to witness)?

A. Yes, I have.

Q. Will you tell us the circumstances under which you say it and when?

A. This was—this is a restricted document that was sent to all people coming into the laboratory.

Q. Did you read it at the time?

A. I did.

Q. Did you familiarize yourself with the contents?

A. I did.

Q. Did you observe as well as you could the instructions that were contained in Government's Exhibit 1?

A. I did.

Q. Those related to what?

A. Related to security and the secrecy of all technical information.

Q. Going forward now at the point where you were [fol. 660] interrupted, you say there came a time when you learned after arrival, what the nature of the work was that was being done at Los Alamos?

A. Correct.

Q. What was the knowledge that you acquired as to the nature of the work?

A. The objective of the laboratory was to construct a nuclear weapon or atomic bomb.

Q. At this point will you tell us whether you performed any particular phase of that work, research, I take it, incidental to the development or incidental to the project?

A. I did.

Q. What did your work involve?

A. My work was associated with implosion research connected with the atomic bomb.

Q. So that we, as laymen may understand, when you say implosion research, does that have something to do with explosives?

A. The distinction between explosion and implosion is in an explosion the shock waves, the detonation wave, the high pressure region is continually going out and dissipating itself. In an implosion the waves are converging and the energy is concentrating itself.

[fol. 661] Q. I take it, concentrating itself toward a common center?

A. Toward a common center.

Q. In other words, in explosion it blows out; in implosion it blows in?

A. Yes.

Q. Is implosion one of the physical reactions incident to the over-all action in the atomic bomb?

A. It is.

Q. So, as I understand you, your precise job was to make experimental studies relating to this phenomena of implosion?

A. It was.

Q. Mr. Koski, in the performance of that work, did you have occasion to use what has been called here a lens, a device called a lens?

A. I did.

Q. What is the lens as you knew it in connection with your experiments?

A. A high explosive lens is a combination of explosives having different velocities and having the appropriate shape so when detonated at a particular point, it will produce a converging detonation wave.

Q. Well, once again, so that we as laymen might understand, I take it out common conception of a lens is a piece of glass used to focus light, is that right?

A. Yes, that is right.

Q. What is the distinction between a glass lens and the type of lens you were working on?



A. Well, a glass lens essentially focuses light. An ex-[fol. 662] plosive lens focuses a detonation wave or a high pressure force coming in.

Q. What are the physical steps which are involved and which were involved in the production of a lens of the type you have described?

A. The procedure in general was to first make a design of this lens. Then I would go down to the Theta shop which was one of the shops which constructed such material for us.

Q. I take it the design for the mold would be prepared by you or under your supervision?

A. Yes.

Q. Then by the same token, the design or the sketch, we may call it that, may we not?

A. Yes.

Q. Would then be taken by you or somebody under your supervision, probably you, to the Theta shop for mechanical work incidental to its manufacture?

A. Correct.

Q. And then the mold having been manufactured in the Theta shop—that was a machine shop?

A. That was a machine shop.

Q. What would you do with the mold in relation to the explosive for the component part of the lens?

A. This mold was taken out to our laboratory, at a remote site. There this mold was used to cast the high explosive necessary in this lens.

[fol. 663] Q. You say to test the high explosive?

The Court: Cast.

The Witness: Cast.

Q. That is, to shape the explosive?

A. That is right.

Q. In the course of the conduct of those experiments, did you have occasion to utilize different and successively changing designs of lenses?

A. We did.

Q. In other words, as you developed a lens and tested it and experimented with it, the results that you obtained would be utilized by you in the development, in the de-

sign of other lenses which would make up for any observed defect in preceding lenses?

A. They were.

Q. In this work about that time, that is, around 1945, starting the latter part of 1944 into 1945 up to the middle of 1945, did you work particularly on what is known as a flat type lens?

A. I did.

Q. Was this flat type lens and your related experiments, were they involved in the development of the atomic bomb?

A. They were.

Q. Now, in the course of your work when you required a lens of your own intended design or your idea, will you describe for us the procedure which you would follow and which you did follow to the end that you should [fol. 664] ultimately have a mold for the lens?

A. I went down to the Theta shop and there discussed with the people in charge of the shop—

Q. Do you remember their names?

A. Mr. Fitzpatrick and Mr. Marshman. They were sergeants at the time. I told them what we needed, gave them rough sketches and verbally explained whatever information they needed to construct this mold for us.

Q. About that time did you—do you have a recollection of having seen the defendant Greenglass in the Theta shop?

A. I have seen Mr. Greenglass in the Theta shop.

Q. Considering the nature of the work that you had with high explosives, what was the physical location of your laboratories and your experimental area in relation to, say, the Theta shop or the balance of the project?

A. We had offices and small laboratories in the same area that the Theta shop was located in. Our actual experimental work, however, was done at a remote site.

Q. Were there reasons for conducting your work at a remote site?

A. The reasons were that we were handling large amounts of high explosives and they were detonated, and there were very heavy shocks.

Q. Now, you have told us in the course of your ex-



[fol. 665] perimentation several different models of the flat type lens were prepared under your instructions, is that right?

A. That is correct.

Q. Now, once again will you explain why that was necessary?

A. Would you repeat that question?

Q. I think you have told us already that it was necessary to have different models, that is, as you progressed, and as you observed the results of experiments, and you varied the design of the lens itself; that is the form in which the explosive was contained in the lens?

A. Correct.

Q. Was that work at Los Alamos, your experiments, classified as secret?

A. They were.

Q. Did that apply to all technical work that was being conducted at Los Alamos?

A. It did.

Q. I show you Government's Exhibit 1—by the way, just withdrawing that: You have been in attendance here and you have heard the witness, Greenglass's testimony, the defendant Greenglass's testimony, have you not?

A. I have.

Q. I show you Government's Exhibit 2, rather. Will you examine that, please? Do you recognize that exhibit as substantially accurate representation—as a substantially accurate replica of a sketch that you made at or about the time which you have testified to at Los Alamos in [fol. 666] connection with your experimentation?

A. I do.

Q. Is that a reasonably accurate portrayal of a sketch of a type of lens, mold or lens that you required in the course of your experimental work at the time?

A. It is.

Q. Would you recognize it as a reasonably accurate replica of the one you submitted to the Theta machine shop?

A. Yes.

Q. For processing?

A. Yes.

Q. In the manner in which you have testified?

A. I do.

Q. I show you Government's Exhibit 6, as to which you have heard Mr. Greenglass testify, and I ask you whether your answers are the same in respect to that exhibit after you have examined it?

A. They are.

Q. Do you recall that in the course of your experimentation at or about that time in 1945 you obtained from the Theta shop molds of the design indicated by those exhibits?

Mr. E. H. Bloch: Now if the Court please, I am going to ask that—

The Court: I can't hear you.

Mr. E. H. Bloch: I am going to ask that this be made [fol. 667] specific. I think Mr. Saypol referred to the year 1945. I want to draw your attention to what Mr. Greenglass testified as to his position from the time he came to Los Alamos to work to the time he left.

Mr. Saypol: Will you suffer an interruption?

Q. Do you recognize those as depictions—

The Court: I can't hear you, Mr. Saypol.

Mr. Saypol: I am sorry.

Q. Do you recognize those exhibits, that is, 2 and 6, as accurate replicas of sketches submitted by you in 1944 and 1945 to the Theta shop as the result of which molds, lens molds were supplied to you for your experimentation?

Mr. E. H. Bloch: Now, if the Court please, I have no objection to the substance of this question, but I ask that the time be more definitely fixed.

By the Court:

Q. If you can remember the approximate month. If you can remember the day, so much the better. If you can remember the approximate months of those years, when those respective sketches were submitted to the Theta shop, let us have it.

A. I cannot.

The Court: Very well.

[fol. 668] Mr. E. H. Bloch: Then I object to the question as too general.

The Court: Overruled.

Mr. E. H. Bloch: I respectfully except.

By the Court:

Q. You do remember that they were some time during the years 1944 and 1945?

A. They were.

By Mr. Sappol:

Q. Or likely the latter part of 1944 and probably the early or first half of 1945?

Mr. E. H. Bloch: I object to this question of Mr. Sappol's on the ground that it is leading and suggestive.

The Court: You want the time. He is trying to get it for you. When he is trying to get it for you, then you object to it.

Mr. E. H. Bloch: Your Honor tried to get it and was unsuccessful.

The Court: Just a moment. I tried to get it by asking him to give me the month. Now Mr. Sappol is asking him to give that portion of the year, by asking whether it is the latter part or forepart.

Mr. E. H. Bloch: I withdraw my objection.

By the Court:

Q. Do you remember whether it was the latter part of [fol. 669] 1944?

A. It was approximately from the middle of 1944 until about the middle of 1945.

By Mr. Sappol:

Q. You have listened, you said, to the testimony of the defendant Greenglass, in relation to Exhibits 2 and 6. Can you tell us whether his testimony is a reasonably accurate description of the devices portrayed in Exhibits 2 and 6 and the functions they had in connection with your experiments?

Mr. E. H. Bloch: I object to the form of the question.

The Court: Overruled.

Mr. E. H. Bloch: Calling for a conclusion.

The Court: I know, but this man is an expert.

Mr. E. H. Bloch: I want to state the ground of my objection.

The Court: Go ahead.

Mr. E. H. Bloch: I have no objection to this witness testifying to any matters concerning science or within his confidence as a scientist in order to explain to the jury more definitively the lay language of the witness Greenglass.

The Court: Yes.

Mr. E. H. Bloch: But I do object to any question which purports to corroborate in any form of the question asked [fol. 670] the veracity or truthfulness of the testimony of the witness Greenglass.

The Court: Your objection is overruled. He is not asking him to tell the Court and jury whether or not Greenglass was telling the truth or not. He is merely asking him with respect to a scientific subject, on which this witness is eminently qualified to testify concerning it.

Mr. Bloch: I am sure that there would be no dispute about that.

The Court: I am not finished.

Mr. E. H. Bloch: I beg your pardon.

The Court: And I have forgotten what I was going to say. You constantly interrupt me before I am through, Mr. Bloch. I tried not to interrupt you.

Well, I will overrule the objection.

Mr. E. H. Bloch: May I have the question read?

(record read.)

Mr. Sappol: Will you Honor allow me to make an observation on the record in connection with the colloquy just preceding? Dr. Koski, as your Honor has suggested, is an expert in the field. I have produced him additionally as the man who has knowledge—the jury may weigh his testimony—

The Court: I know very well.



[fol. 671] Mr. Saypol: (Continuing.) Of the experiments.

The Court: I know very well, but as to this particular question, however, he was testifying as an expert.

Mr. Saypol: Very well.

By Mr. Saypol:

Q. Now, in respect to Government's Exhibit 7, will you examine that, please, Dr. Koski? Having examined it, having heard Greenglass's testimony as to what it depicts, will you tell us whether it is familiar to you?

A. It is.

Q. What does it portray to you?

A. It is essentially—it is a sketch, a rough sketch of our experimental set-up for studying cylindrical implosion.

Q. Did you hear Mr. Greenglass testify as to the description, written description of that experiment that he delivered to one Harry Gold in June, 1945?

A. I did.

Q. Is Government's Exhibit 7 and the details of the information as testified to by Mr. Greenglass that he said he imparted to Gold in June, 1945 a reasonably accurate—are they reasonably accurate descriptions of the experiments and their details as you knew them at the time?

Mr. A. Bloch: Objected to upon the ground that it is [fol. 672] an attempt to characterize the testimony of another witness; not calling for fact.

(Question read.)

The Court: I will strike from that question, "as testified to by Mr. Greenglass".

Now do you understand the question?

The Witness: I do.

The Court: Can you answer it?

The Witness: They are.

Q. That is the experiment that you yourself were conducting in conjunction with the development of the atomic bomb?

A. They are.

Q. In your special field as you knew it at the time, 1944 and 1945, did you have knowledge that the experiments which you were conducting and the effects as they were observed by you could have been of advantage to a foreign nation?

Mr. E. H. Bloch: Objected to upon the ground that this witness has not been qualified as a political expert; merely as a scientific expert. I object to the question as calling for a conclusion.

The Court: I will overrule it.

Mr. E. H. Bloch: I respectfully except.

A. I wonder if you would repeat the question.

(Last question read.)

[fol. 673] A. I did.

Q. And would that knowledge have been of advantage to a foreign nation?

Mr. E. H. Bloch: The same objection, your Honor.

The Court: Overruled.

Q. This question follows my previous question and your answer; In that field in which you were engaged, do you know whether anywhere else there had been similar prior experimentation?

Mr. E. H. Bloch: Same objection, your Honor.

The Court: Overruled.

Mr. E. H. Bloch: Exception.

A. To the best of my knowledge and all of my colleagues who were involved in this field, there was no information in text books or technical journals on this particular subject.

Q. In other words, you were engaged in a new and original field?

A. Correct.

Q. And up to that point and continuing right up until this trial has the information relating to the lens mold and the lens and the experimentation to which you have testified continued to be secret information?

A. It still is.

Q. Except as divulged at this trial?

A. Correct.

[fol. 674] The Court: As far as you know, only for the purposes of this trial?

The Witness: Correct.

Mr. Saypol: Will your Honor allow a statement for the record in that respect? The Atomic Energy Committee has declassified this information under the Atomic Energy Act and has made the ruling as authorized by Congress that subsequent to the trial it is to be reclassified.

The Court: Counsel doesn't take issue with that statement.

Mr. E. H. Bloch: No, not at all. I read about it in the newspapers before Mr. Saypol stated it.

Mr. Saypol: May I have just a moment, if the Court please?

(Mr. Saypol confers with associates.)

Mr. Saypol: You may examine.

Mr. E. H. Bloch: Will you bear with me for three or four moments, your Honor, since I am not a scientist, I don't want to query about matters which might appear asinine.

Cross-examination.

By Mr. E. H. Bloch:

Q. Dr. Koski, did you turn over any of the sketches requested in Government's Exhibits 2, 6 and 7 to the defendant Greenglass?

A. I did not.

[fol. 675] By the Court:

Q. Was the defendant Greenglass in a position where by reason of his employment in the Theta shop he could see the sketches which you turned over?

A. He was.

By Mr. Bloch:

Q. Mr. Greenglass was a plain, ordinary machinist, was he not?

Mr. Saypol: I object to characterizations.

The Court: I will permit the characterization.

A. Correct.

Q. Now, you heard Mr. Greenglass testify about the E shop, did you not?

A. Yes.

Q. Then I believe he testified that there were two other shops similar to the E shop in that technical area and finally there came a time when there was a new building which was called the Theta building and all the shops moved in there, is that correct?

A. That is not correct.

Mr. Saypol: Well,—

The Court: Well, what is not correct?

The Witness: The Theta shop was a separate shop. All of the shops didn't move into this building.

Mr. Saypol: I want to know what is incorrect.

By the Court:

Q. You are not characterizing that Greenglass had testified to that and therefore was incorrect?

A. No.

[fol. 676] Q. You are characterizing that the statement of counsel as formulated in his question is incorrect.

Mr. E. H. Bloch: Well let us clarify it for everybody's sake then.

By Mr. E. H. Bloch:

Q. Was there an E shop?

A. There was.

Q. And did that E shop at some time move into another building?

A. It did.

Q. What was that other or new building called?

A. That was the location of the Theta shop.



Q. Now, was the Theta shop in existence and used for work at the project while the E shop was being used for work?

A. There might have been some overlapping but I am not sure.

Q. Now, were there other shops besides the E shop—I believe he characterized them as the E. C. shops; you correct me if I am wrong—that also moved into the new building, or the Theta shop at the time that you started to use the Theta shop, is that correct?

A. No. The Theta, E and C shop never were in the same building.

Q. Now, when the personnel of the E shop moved into the Theta building were the same number of machinists used for the work which you supervised?

A. I do not recall the details about the machinists. I usually contacted their superiors.

[fol. 677] Q. In fact, you very seldom had any conversations with any machinists, is that right?

A. Rarely, but not completely—on occasions we did have.

Q. It was very rare?

A. It was rare.

Q. Now, did you know when the defendant Greenglass became an assistant foreman?

A. I did not.

Q. Did you know when he became a foreman?

A. I did not.

Q. Now, just two more questions, Doctor. Do these exhibits—

The Court: What are the numbers?

Mr. E. H. Bloch: I am going to mention them.

Q. (Continuing)—2, 6 and 7, purport to be a complete picture of these lenses in the scientific sense?

The Court: Do you understand, Doctor, what he means by a complete picture?

The Witness: I am not clear as to what you mean.

Mr. E. H. Bloch: Well, maybe I am a little too vague.

Mr. Sappol: To preserve accuracy, I think the testimony

that 2 and 6 are sketches of molds, and 7 is a description of an experiment.

The Court: That is right.

Mr. Sappol: Am I correct?

Mr. E. H. Bloch: That is correct.

The Witness: That is correct.

[fol. 678] Mr. Sappol: So counsel's question to the extent that it refers to 7 should be corrected.

Q. Well, let us satisfy everybody. I will tell you what I am driving at, Dr. Koski: is it not a fact that a scientist would not consider Government's Exhibits 2, 6 and 7, whether or not two of them relate to a lens and one of them relates to some kind of cylindrical apparatus, until the scientists knew the dimensions of the lens or the cylindrical apparatus?

A. This is a rough sketch and, of course, is not quantitative but it does illustrate the important principle involved.

Q. It does omit, however, the dimensions?

A. It does omit dimensions.

Q. It omits, for instance, the diameter, does it not?

A. Correct.

Q. Now is it not a fact that—

The Court: You say it does, however, set forth the important principle involved, is that correct?

The Witness: Correct.

The Court: Can you tell us what that principle is?

The Witness: The principle is the use of a combination of high explosives of appropriate shape to produce a symmetrical converging detonation wave.

Q. Now, weren't the dimensions of these lens molds very [fol. 679] vital or at least very important with respect to their utility in terms of success in your experiments?

A. The physical over-all dimensions that you mention are not important. It is the relative dimensions that are.

Q. Now the relative dimensions are not disclosed, are they, by these exhibits?

A. They are not.

Mr. E. H. Bloch: That is all.

Redirect examination.

By Mr. Saypol:

Q. The important factor from the experimental point of view is the design, is it not?

A. Correct.

Q. That was original, novel at the time, was it not?

A. It was.

Q. Can you tell us, Doctor, whether a scientific expert in the field you were engaged in could glean enough information from the exhibits in evidence so as to learn the nature and the object of the experiment that was involved in the sketches in evidence?

A. From these sketches and from Mr. Greenglass's descriptions, this gives one sufficient information, one who is familiar with the field, to indicate what the principle and the idea is here.

Q. And would I be exaggerating if I were to say, colloquially, that one expert, interested in finding out what was going on at Los Alamos, could get enough from those [fol. 680] exhibits in evidence which you have before you to constitute a tip-off as to what was going on at Los Alamos?

Mr. E. H. Bloch: I object to the form of the question, calling for the operation of somebody else's mind.

Mr. Saypol: I am talking about an expert, if the Court please.

The Court: Yes. What are you objecting to? The use of the words "tip-off"?

Mr. E. H. Bloch: No.

The Court: You are not objecting to the use of those words?

Mr. E. H. Bloch: I am objecting to that amongst other things, but my objection goes to the very substance of the question.

The Court: And in addition you object to the words "tip-off"?

Mr. E. H. Bloch: Yes.

The Court: I will overrule the objection but we will change "tip-off" to "indication."

Mr. Saypol: May we substitute "reveal"? Reveal what was going on at Los Alamos.

(Last question read as follows:)

"Q. And would I be exaggerating if I were to say colloquially that one expert, interested in finding out what [fol. 681] was going on at Los Alamos, could get enough from those exhibits in evidence which you have before you to reveal what was going on at Los Alamos?"

A. One could.

Mr. E. H. Bloch: Of course my objection still goes.

Q. Rather than using the preliminary—

Mr. E. H. Bloch: I am sorry.

Mr. Saypol: Let me finish the question.

Mr. E. H. Bloch: I want to preserve the record. Go ahead.

Q. Rather than using my former question, as to suggesting that it would be an exaggeration, is it not a fact that one expert could ascertain at that time if shown Exhibits 2, 6 and 7, the nature and the object of the activity that was under way at Los Alamos in relation to the production of an atomic bomb?

A. He could.

Mr. Saypol: That is all.

Mr. E. H. Bloch: Will your Honor bear with me just a moment? No further questions.

Mr. Saypol: May I address one further question? It is a technical and it has been suggested to me.

By Mr. Saypol:

Q. There was a question put to you by counsel regard- [fol. 682] ing the fact that the exhibits do not show the dimensions. Then there was some statement as to relative dimensions. Distinguishing between relative dimensions and design, it is not the fact that design of the component was the primary fact of importance in these sketches?

A. It was.



Q. So that the sketches, particularly 2 and 6, do show relative dimensions in that they show the relations of each of the factors in the lens, one to the other?

A. They do.

Mr. Saypol: That is all.

Recross-examination.

By Mr. E. H. Bloch:

Q. Well, Doctor, when you gave instructions to, I believe you said it was Sergeant Fitzpatrick—was that the name?

A. Yes.

Q. And the other gentlemen?

A. Marshman.

Q. Did you detail with any specificness the measurements of the lens or of the component parts of the lens that you wanted constructed?

A. I gave specific instructions. I gave rough sketches, and then while this lens mold was in progress we had to send down one of our men to sketch out, to precisely draw the shape of this lens on the metal from which it was being cut.

Q. When you say precisely draw, are you saying now that precision work was necessary in the construction of this mold lens?

[fol. 683] A. The shape of this lens is an important factor.

Q. So aside from the shape—I am trying to direct your mind, Doctor, to the precision, quality of the work that was entailed and necessary in the construction of the lens.

A. It had to be a precision job.

Mr. R. H. Bloch: That is all.

By the Court:

Q. While there might have been some other details that might also have been of some use to a foreign nation which were not contained on Exhibits 2, 6 and 7, the substance of your testimony, as I understand it, was that there was sufficient on Exhibits, 2, 6 and 7 to reveal to an expert *which* was going on at Los Alamos?

A. Yes, your Honor.

Mr. Saypol: That is all.

Mr. E. H. Bloch: That is all.

The Court: It is about twelve minutes of one now. In view of the fact that I turned over Court's Exhibits 1 to 5, we will take a rather extended luncheon recess. So you may now have an hour and forty-five minutes to examine them, and we will return here at two-thirty, ladies and gentlemen.

(Recess until 2:30 p. m.)

[fol. 684]

AFTERNOON SESSION

COLLOQUY BETWEEN COURT AND COUNSEL

(Jury not present.)

Mr. E. H. Bloch: May we approach the bench?

(The following discussion took place at the bench, outside of the hearing of the jury;)

Mr. E. H. Bloch: If the Court please, with respect to the documents in the grand jury minutes which have been offered for identification, the defendant Julius Rosenberg and the defendant Ethel Rosenberg are satisfied to let the record stand as it is.

The Court: Very well.

Mr. Phillips: As for the defendant Sobell, frankly, I am not quite convinced that I would be doing my duty by answering one way or the other. My mind is open. I have tried to weigh it, and I am very conscientiously concerned with respect to making a decision at this time. I should like the indulgence of the Court to think it over between tonight and tomorrow.

The Court: I am going to ask you to make your decision now. You have had one hour and 45 minutes.

Mr. Phillips: Do you know how much reading matter there is?

The Court: I read it myself, Mr. Phillips.



[fol. 685] Mr. Phillips: Did you read all the statements in an hour and a half?

The Court: I read every word of it and I read it in about 35 minutes, having in mind the testimony while I was reading it.

Mr. Kuntz: The point is, it took us all the time; we had a sandwich brought in.

Mr. Phillips: We were sitting here all the time.

Mr. Kuntz: May I say this: We had finished shortly before recess was about to end. Mr. Phillips and I were in the middle of discussing this question. I will tell you that very frankly.

The Court: Do you want another five minutes?

Mr. Phillips: We are in disagreement at this moment.

Mr. Kuntz: I personally feel, as far as our client is concerned, I am satisfied with the record as it stands. We are in the midst of discussing it. I don't know how long it will take me to convince Mr. Phillips. I am telling you that very frankly there is disagreement between us.

Mr. Phillips: Let it be understood that I am not dissatisfied with the record as it stands, but I am at present of the opinion that using the statement of June the 20th— [fol. 686] Mr. Kuntz: July 20th.

Mr. Phillips: Of July 20th and July 21st, only, these two records, as a basis of a few questions to the witness Elitcher, that might clarify certain elements of the situation in favor of Sobell.

The Court: It might clarify it also in favor of the government.

Mr. Phillips: Please.

The Court: That was the feeling I had when I read it.

Mr. Phillips: If I did not have such feeling—

Mr. Sappol: That is why I think I had the right to use it.

Mr. Phillips: I will make up my mind, but that is one thing that is a problem.

The Court: Off the record.

(Further discussion off the record.)

Mr. Kuntz: I think the record is favorable.

Mr. Phillips: For the next 30 years I will worry about it.

The Court: Then, as I understand it, gentlemen, every-

body is now in agreement that there is going to be no further use made of Court's Exhibits 1 to 5 and the witness Elitcher is excused; is that correct?

Mr. E. H. Bloch: Yes.

[fol. 687] Mr. Phillips: By the way, I don't like the word "agreed"; we are not all agreed.

The Court: You are waiving your right.

Mr. Phillips: My request is still for time to actually make up my mind.

The Court: All right, at this particular point now you desire no further examination of Mr. Elitcher. You have examined Court's Exhibits 1 to 5 and you have heard what Mr. Bloch said; you have heard what you associate said, and as far as you are concerned you don't want Mr. Elitcher to take the stand.

Mr. Phillips: As far as I am concerned, I am not prepared *not* to examine Mr. Elitcher and I make request of the Court to give me time until tomorrow morning to make up my mind as to what is in the best interests of justice to my client.

The Court: I have given you one hour and 45 minutes now to do. I personally read all of that matter in 35 minutes.

Mr. Phillips: Maybe I am not as quick-witted as the Court.

The Court: You are very quick-witted.

Mr. Sappol: When your Honor refers to Mr. Phillips' associate, you mean Mr. Kuntz.

The Court: I mean Mr. Kuntz, yes.

[fol. 688] Mr. Phillips: Mr. Kuntz and I are at variance at this point.

The Court: Very well then, we will proceed with the next witness.

The Court: Send for the jury.

(The jury returned to the courtroom at 2:40 p. m.)

The Court: Do you want the witness Greenglass?

Mr. Sappol: Yes, we have sent for him.

Mr. Cohn: Yes.



DAVID GREENGLASS, resumed the stand.

Direct examination continued.

By Mr. Cohn:

Q. Mr. Greenglass, one thing I forgot to ask you about this morning in connection with the meeting up at Rosenberg's apartment, when you and your wife went there for dinner after Ann Sidorovich had left the apartment. Did you have a conversation with Mr. and Mrs. Rosenberg?

A. Yes, I did.

Q. Will you tell us what they said to you at that point?

A. At that point—

Mr. E. H. Bloch: If the Court please, I submit the question has already been asked and already been answered. I have no objection if Mr. Cohn wants to direct the witness to some specific item which you feel—

Mr. Cohn: That is precisely what I am doing.  
[fol. 689] The Court: All right.

A. Well—

Mr. E. H. Bloch: Let us not have a rehash of the testimony.

A. Well, at this point Mr. and Mrs. Rosenberg told me they were very happy to have me come in with them on this espionage work and that now that I was in it there would be no worry about any money they gave to me, it was not a loan, it was money given to me because I was in this work and that it was not a loan.

Q. Did they say anything about the source of that money?

A. They said that it came from the Russians who wanted me to have it.

Q. Now you have told us about the visit of Harry Gold to you in June about the material that you turned over to him. When after that was the next occasion when you saw Julius Rosenberg?

A. It was on my furlough in September, 1945.

Q. Where—you got a furlough in September of 1945?

A. That is right.

Q. Where did you go on that furlough?

A. I went home but I no longer had the apartment at 266 Stanton Street, so we stayed in an apartment where I had been living before I was married, which was in the building that my mother lives in, 64 Sheriff Street.

[fol. 690] Q. In other words, you came from New Mexico to New York for the furlough?

A. That is right.

Q. Did you wife come with you?

A. She did.

Q. Now how long after you arrived in New York—  
The Court: Which furlough is this?

Mr. Cohn: September 1945, your Honor. The other one was January, 1945.

The Court: That is right.

Q. You had not been in New York from January, 1945 until September 1945, is that right?

A. I had not, no.

Q. And this meeting with Harry Gold took place out at New Mexico?

A. That is right.

Q. Now, in September 1945, after you returned to New York, when was it that you first saw Julius Rosenberg?

A. It was the morning after I came to New York.

Q. Now, would you tell us what happened? Where did you see him?

A. He came up to the apartment and he got me out of bed and we went into another room so my wife could dress.

Q. Did you have a conversation in that other room?

A. I believe we did.

Q. What did he say to you?

A. He said to me that he wanted to know what I had for him.

Q. Did you tell him what you had for him?

A. Yes. I told him "I think I have a pretty good"—  
[fol. 691] "a pretty good description of the atom bomb".

Q. The atom bomb itself?

A. That's right.

Q. Now at this point, Mr. Greenglass, I want to take



you back to your testimony on Friday afternoon. Did I understand you to say—well, I will be a little more specific. I am going to take you back to meeting in January 1945 when you had a conversation with Rosenberg at your apartment. Did I understand your testimony to be that Rosenberg had given you a description of the atom bomb?

A. He did.

Q. He gave you a description of the atom bomb?

A. That is right.

Q. Will you tell us the conversation you had with him at the time when he gave you this description of the atom bomb?

A. Well, he said to me he would have to give me an idea of what the bomb was about so that I would be able to know what I am looking for. He then gave me a description of what I later found out to be was the bomb that was dropped at Hiroshima.

Mr. E. H. Bloch: Now if the Court please, I do not like to interrupt the witness. I move that everything after what he subsequently found out—

The Court: Yes, Mr. Bloch.

Mr. E. H. Bloch: —be deleted from the answer.

The Court: Strike it out.

[fol. 692] Mr. E. H. Bloch: And I also request at this time, in connection with this very specific inquiry that the witness be cautioned against using the word "description" but let us have specifically what the description was.

Mr. Cohn: I intend to come to that directly, your Honor. I can't do everything at one time.

Mr. E. H. Bloch: I am sorry, I did not mean it by way of criticism.

Mr. Cohn: I am sure of that, Mr. Bloch.

Your Honor, I object to striking the remainder of that answer. I think it is important and I don't see why the witness is not able to give us knowledge that he gained in the course of his official duties at Los Alamos.

The Court: You haven't brought out what he subsequently learned, and I don't know from whom.

Q. All right, tell us under what circumstances you subsequently learned that this bomb was the type atom bomb dropped on Hiroshima?

Mr. E. H. Bloch: I object to that as not binding on the defendant.

The Court: Now of course, I take it you are bringing into force his knowledge of a particular project and from what he learned there so that he could apply what was told by Rosenberg to him to the knowledge that he learned [fol. 693] and concluded that that was the bomb on Hiroshima.

Mr. Cohn: Yes, your Honor.

The Court: Very well, I will overrule that.

Mr. E. H. Bloch: Except this, your Honor, I submit that for the purpose of clarity that we are dealing here with a conversation which allegedly took place between this witness and Julius Rosenberg in New York in January, 1945.

The Court: That is correct.

Mr. E. H. Bloch: And I believe that Mr. Cohn was inquiring of the witness what that conversation was.

The Court: That is correct.

Mr. E. H. Bloch: Now I submit that we ought to have that conversation, and if Mr. Cohn specifically wants to point out that this witness may have acquired information later, I can see that but not—what we are trying to do is to anticipate in this conversation, what this witness may have found out years later.

The Court: It is perfectly all right; I see no objection to that.

Mr. Cohn: Of course, your Honor, if Mr. Bloch would let it go on for a while he will see a very clear picture. Sometimes he makes these objections, when if he did not his problem would be made clear to him in two or three [fol. 694] further questions.

Mr. E. H. Bloch: Well, thanks for the suggestion.

Mr. Cohn: All right. That will be a standing suggestion, and if I don't live up to that, Mr. Bloch, of course on cross-examination can inquire fully into any matters which he feels have not been brought clearly out.

Now, could we have my last question read?



(Question read.)

Mr. E. H. Bloch: That is objected to, your Honor, and I assume you have overruled my objection and I take an exception.

A. Well, in the course of my work at—

Mr. E. H. Bloch: Wait. Now I object. I object to the words in the question about the bomb that was subsequently dropped on Hiroshima.

The Court: I overruled your objection. That is what you objected to before.

Mr. E. H. Bloch: Well, I did not think that the word "Hiroshima" was used in the previous question. Maybe I am wrong.

The Court: It was.

Mr. E. H. Bloch: At any rate, my objection stands.

Q. You say in the course of your work?

A. In the course of my work at Los Alamos I came in contact with various people who worked in different parts of the project and also I worked directly on certain apparatus [fol. 695] paratus that went into the bomb, and I met people who talked of the bombs and how they operated.

Q. And on the basis of that knowledge and information?

A. I gave the sketches and these reports.

Q. Right; and was it on the basis of that same knowledge and information that you learned that this bomb which Rosenberg had described to you was the type of atom bomb that was dropped on Hiroshima?

A. That is right. They—

Q. All right. Could you tell us, as you remember, in exactly what words Rosenberg described this type atom bomb to you?

A. He said there was fissionable material at one end of a cube and at the other end of the cube there was a sliding member that was also of fissionable material and when they brought these two together under great pressure, that would be—a nuclear reaction would take place. That is the type of bomb that he described.

Q. Was that the first time you had ever heard a description of that type atom bomb?

A. That is right.

Q. Or of any type atom bomb, is that right?

A. That is right.

Q. Now did Rosenberg tell you at that time why he was describing this type atom bomb to you?

A. He was describing it to me so that I should know [fol. 696] what to look for, what I could—

The Court: He told you that?

The Witness: That is right.

Q. After he gave you that description, the Hiroshima type, did you, in ensuing months, gather information concerning the atom bomb?

A. I did.

Q. Will you tell us just how you went about that?

A. I would usually have access to other points in the project and also I was friendly with a number of people in various parts of the project and whenever a conversation would take place on something I didn't know about I would listen very avidly and question—

Mr. E. H. Bloch: I move to strike out the word "avidly".

The Court: Overruled.

Mr. E. H. Bloch: Exception.

Mr. Cohn: May we have the last few words?

(Record read.)

A. (Continuing:) And question the speakers as to clarify what they had said. I would do this surreptitiously so that they wouldn't—

Mr. E. H. Bloch: I move to strike that out.

The Court: You would do it, I take it, so that they wouldn't know it.

The Witness: I would do it so they wouldn't know.

[fol. 697] The Court: Strike out "surreptitiously". Go ahead.

Q. Now, in addition to that fact, you yourself were working on various things used in connection with the experimentation used on the atom bomb?



A. That is correct.

Q. Is that correct?

A. Yes, sir.

Q. Such as this high explosive lens?

A. High explosive lens molds were made in my shop and I got—as a matter of fact, there were molds used on the atom bomb.

Q. Was it on the basis of this knowledge which you had accumulated over those months that you told Rosenberg you thought you had a pretty good description of the atom bomb itself?

A. I did.

Q. Did you at a later time, give to Rosenberg a description of the atom bomb itself?

A. I did.

Q. Now, was this atom bomb which you described to him, the same type atom bomb he had described to you in January?

A. It was not.

Q. Would you explain that to us?

[fol. 698] A. One type of bomb, the one that he described to me, was dropped at Hiroshima, and it was the only type bomb of that nature that was made. The one I got most of my knowledge on, got the knowledge—the information on, was of a different nature. It was a type that worked on an implosion effect.

Q. It was a different type atomic bomb?

A. That is right.

Mr. E. H. Bloch: If the Court please, I move to strike out the answer upon the ground that this witness has not been qualified as an expert.

The Court: Overruled.

Mr. E. H. Bloch: I except.

Q. Was this type atom bomb a type which was manufactured at Los Alamos, to your knowledge, after the Hiroshima bomb was no longer in process of manufacture?

A. That is right.

Q. Did you give Rosenberg the description at that time?

A. No. It was later in the afternoon.

Q. All right. Now, I believe we are at the point where Rosenberg—you told Rosenberg you had a pretty good description of the atom bomb. What did he say to you at that point?

A. He said he would like to have it immediately, as soon as I possibly could get it written up he would like to get it.

[fol. 699] Q. He wanted it written up?

A. Yes.

Q. Now, would you tell us what you did?

A. Oh, besides that, during this conversation, he gave me \$200. and he told me to come over to his house. I then went to see my—well, he then left and I was there alone with my wife.

Q. Did you have any discussion with your wife?

A. My wife didn't want to give the rest of the information to Julius, but I overruled her on that. I told her that—

Mr. E. H. Bloch: I object to this, not only because it was not in the presence of the Rosenbergs, but because the witness is stating conclusions.

Q. Tell us what you said to her.

A. I have said that "I have gone this far and I will do the rest of it, too".

Q. How about the money, what did you do with the \$200.?

A. I gave that to my wife.

Q. What happened after this conversation between you and your wife?

A. We went down and had—

By the Court:

Q. Before you get to that point, when did you turn over Exhibits 2 and 6?

Mr. Cohn: 2 and 6, your Honor, are the first two exhibits on the high explosive lens.

[fol. 700] The Court: They are replicas of it. When were they turned over?



By Mr. Cohn:

Q. When did you give the first sketch, the first lens mold sketch?

A. That was in January, 1945.

The Court: What about the second one, 6?

Mr. Cohn: Do we have the exhibit here?

Q. This is Exhibit 2. His Honor's question was, when did you turn that over?

A. That was in January, 1945.

Q. To whom did you give it?

A. I gave that to Julius Rosenberg.

Q. Now, Exhibit 6?

A. I gave that to Harry Gold.

Q. In June of 1945 at Albuquerque?

A. In June, 1945, at Albuquerque.

Mr. Cohn: Does that clarify it, your Honor?

The Court: How about 7?

Q. Exhibit 7. Am I correct in stating you gave Exhibit 7 to Gold at the same time you gave him Exhibit 6?

A. I gave that too, that is right.

The Court: Very well.

Q. Now tell us what you did after you had this discussion with your wife.

A. Well, we went down—it was late in the morning—we had a combination breakfast and lunch, and I came back up again and I wrote out all the information and [fol. 701] drew up some sketches and descriptive material.

Q. Did you draw up a sketch of the atom bomb itself?

A. I did.

Q. Did you prepare descriptive material to explain the sketch of the atom bomb?

A. I did.

Q. Was there any other material that you wrote up on that occasion?

A. I gave some scientists' names, and I also gave some possible recruits for espionage.

Q. Now, about how many pages would you say it took to write down all of these matters?

A. I would say about 12 pages or so.

Q. About what time did you complete preparing this report?

A. It must have been about 2 in the afternoon.

Q. Now, tell us what you did after you prepared these 12 pages of written material, including the sketch of the atom bomb and a description of the sketch.

A. My wife and myself got into my father-in-law's car and we drove around to Julius's house. We went up to the house and I gave Julius the information which—

Q. Gave him all of this written information?

A. That is right.

Q. Including this sketch?

A. That is right.

Mr. Cohn: May we have this marked for identification, [fol. 702] your Honor?

(Marked Government's Exhibit 8 for identification.)

Q. Have you prepared for us, Mr. Greenglass, a replica of the sketch—I believe it is a cross-section sketch of the atom bomb—a replica of the sketch you gave to Rosenberg on that day?

A. I did.

Q. I show you Government's Exhibit 8 for identification, Mr. Greenglass, and ask you to examine it and tell us whether or not that is a replica of the sketch, cross-section of the atomic bomb?

A. It is.

Q. And how does that compare to the sketch you gave to Rosenberg in September, 1945?

A. About the same thing. Maybe a little difference in size; that is all.

Q. Except for the size?

A. Yes.

Q. It is the same?

A. Yes.

Q. By the way, who was present when you handed the written material including this sketch over to Rosenberg?

A. My wife, my sister, Julius and myself.

Q. By your sister, you mean Mrs. Rosenberg?

A. That is right.



Mr. Cohn: We offer this in evidence, your Honor.  
[fol. 703] Mr. E. H. Bloch: I object to it on the same ground urged with respect to Government's Exhibits 2, 6 and 7, and I now ask the Court to impound this exhibit so that it remains secret to the Court, the jury and counsel.

Mr. Sappol: That is a rather strange request coming from the defendants.

Mr. E. H. Bloch: Not a strange request coming from me at the present.

Mr. Sappol: We have discussed that with the Court, as counsel knows, and I think nothing else need be said. If I had said it or my colleague, Mr. Cohn had said it, there might have been some criticism.

The Court: As a matter of fact, there might have been some question on appeal. I welcome the suggestion coming from the defense because it removes the question completely.

Mr. Sappol: And I am happy to say that we join him.

The Court: All right. It shall be impounded. Let me see it. Do you have any objection to the descriptive words on the bottom wherein it is stated, cross-section A bomb, not to scale?

Mr. E. H. Bloch: I haven't seen the exhibit itself, your Honor.

[fol. 704] The Court: Show it to counsel.

(Handed to Mr. E. H. Bloch.)

Mr. E. H. Bloch: No, I have no objection to that.

Mr. Cohn: May the exhibit be received in evidence, your Honor?

The Court: Yes.

(Government's Exhibit 8 for identification received in evidence.)

The Court: It will be sealed after it is shown to the jury.

Mr. Cohn: Yes, your Honor. I would like to interrogate the witness on the basis of it for a moment. Mr. Sappol calls my attention to the fact that all defense counsel have

not joined in this request that this document be impounded. I wonder if the defendant Sobell's counsel care to join?

The Court: I thought it was understood that where one counsel spoke and the other one didn't object to what he said, by his silence he acquiesced in what the other counsel was saying.

Mr. Kuntz: I thought your Honor made that a rule throughout this trial.

By Mr. Cohn:

Q. Now, Mr. Greenglass, address yourself to that sketch [fol. 705] and tell us, if you will, just what you wrote as best you remember of the descriptive material you gave to Rosenberg in September, 1945, the descriptive material in that sketch.

A. Well, I had this sketch marked A, B, C, D, E, F, and those referred to various parts of the bomb.

Q. Now tell us exactly what you wrote in this descriptive material.

#### COLLOQUY BETWEEN COURT AND COUNSEL

Mr. E. H. Bloch: Before you answer the question, may we come up to the bench, your Honor?

(The following took place at the bench, out of the hearing of the jury.)

Mr. E. H. Bloch: Let me say by way of explanation, Mr. Sappol, that despite the fact that the Atomic Energy Commission may have declassified this, I was not at all sure in my own mind, and I am talking privately, whether or not even at this late date, this information may not be used to the advantage of a foreign power. Remember, I am talking personally. And since you said something which might be an implied criticism of me, and said that in front of the jury, and I certainly don't take umbrage at your criticism, I want to say to the Court as far as this descriptive material is concerned, I am perfectly satisfied that this also be kept secret.

[fol. 706] The Court: Do you want it to be done in camera without the spectators being present?



Mr. Saypol: In fact, if Mr. Bloch will state that that is his request, to be recognized for what it is, we obviously have been proceeding on the assumption—

The Court: That is correct.

Mr. Saypol: That under the law we are required to apprise the defendant of the nature of the case.

Mr. E. H. Bloch: Absolutely.

Mr. Saypol: If Mr. Bloch will state in the presence of the jury that he requests it that way.

The Court: Requests what?

Mr. Saypol: Requests the courtroom to be cleared.

The Court: He doesn't have to request it. I can state it. As long as we have right here Mr. Bloch's statement that he has no objection to clearing the courtroom.

Mr. E. H. Bloch: That is correct.

Mr. Saypol: Well, let us put it this way: I had assumed—I was on the horns of a dilemma. We thought this out very carefully in preparation, the four of us, together with the representatives of the Atomic Energy Commission, Mr. Lane, in my behalf, was—with representatives of the Department of Justice took this up first with the [fol. 707] entire Commission on February 8th and then with the entire representation of the Joint Congressional Committee on Atomic Energy, and the ultimate resolution was that it was left in my discretion as to how much of this material should be disclosed, on the premise that the primary obligation in the administration of justice was that the defendants were entitled to be apprised of the nature of the case against them. I proceeded as I did.

The Court: Correct. Let me ask you this. Perhaps we can even avoid this matter of clearing the courtroom if counsel stipulate right now that the matters that were described, as he is about to describe, were of a secret and confidential nature.

Mr. Saypol: May we do it this way.

The Court: In regard to the national defense.

Mr. Saypol: May I state it on the record in the form of a request or in the form of a request to the Court? Your Honor may address it to the defense counsel for their concurrence. Is that all right? Mr. Denson?

Mr. Denson: Yes.

The Court: Who is that gentleman?

Mr. Saypol: Mr. Denson, Mr. William Denson, chief of the litigation section of the Atomic Energy Commission. [fol. 708] He is here with representatives of the Commission. He has been in attendance on this phase of the case.

The Court: Gentlemen, how do you feel about that, addressing myself to counsel for the defense?

Mr. E. H. Bloch: May I consult with co-counsel for just a moment?

(Defense counsel confer.)

Mr. E. H. Bloch: If the Court please, after some conversation between counsel, we cannot find concurrence among ourselves and, although I have made my position, or at least I have given my thinking to the Court, I am willing in the interest of harmony of the defense, to yield to the reservations and misgivings of Mr. Phillips and Mr. Kuntz and let the trial proceed, and if the Court desires to keep this type of testimony secret I, for one, would have no objection.

The Court: I won't keep it secret from the jury.

Mr. E. H. Bloch: Not secret from the jury.

Mr. A. Bloch: I might say, personally, that I dissent from the conclusion reached by my three friends. I would like to agree with the original proposition.

The Court: You would like to stipulate it?

[fol. 709] Mr. A. Bloch: I would like to stipulate it as an American citizen and as a person who owes his allegiance to this country. I would like to stipulate it first to save the expense; I understand it would save quite an expense to the Government to bring all these people here.

The Court: May I ask you gentlemen, Mr. Phillips and Mr. Kuntz, why aren't you stipulating this?

Mr. Phillips: For the reason that I do not feel that an attorney for a defendant in a criminal case should make concessions which will serve the People from the necessity of proving things, which in the course of the proof we may be able to refute.

The Court: Particularly as to your client, where do you come in on this phase?



Mr. Phillips: That is just the point. It may not be connected. I don't believe it will be, but I am not sure that they may try to connect it later.

The Court: Are you going to be technical and ask them to give specifically every detail? Is that what you want?

Mr. Phillips: Well, if we are not to be connected, it is [fol. 710] of no consequence whether they give details or not.

Mr. Sappol: On the state of the record, I approach the bench at the request of counsel—

The Court: I didn't say you were not connected.

Mr. Sappol: I approach the bench at the request of counsel for the defense, or some of them, or one of them who made an offer. I think I should be free now to state that if counsel are not unanimous in preserving secrecy I am inclined to go forward with my proof. That was the offer that was made by Mr. Bloch in the presence of the jury.

The Court: Let me handle it.

Mr. Kuntz: We have no objection.

Mr. Phillips: We don't raise any objection to Mr. Bloch's suggestion. We don't object to that.

The Court: What are you objecting to?

Mr. Phillips: To making concessions at this time.

The Court: Wait a minute. I am not asking for a concession. Are you willing to stipulate that this matter that he is about to testify to, the details, because he will supply it—he has a witness who will say that it concerns national defense and is a secret matter. All they are asking you to do is to stipulate that it is.

[fol. 711] Mr. Phillips: That is the same thing as a concession. I am inclined not to do that, but that doesn't interfere with Mr. Bloch's offer in open court. We don't object to that.

Mr. Kuntz: We don't object to that.

The Court: Wait a minute, you are objecting. You do want the details. You are not willing to agree to them.

Mr. Phillips: Will you please turn back?

The Court: No, I don't want to turn back. Let me hear what Mr. Kuntz says.

Mr. Kuntz: As I understand it, Mr. Bloch's suggestion

was that the public be excluded from hearing any of this testimony.

The Court: That is right, I know that.

Mr. Kuntz: We haven't disagreed with that and we don't disagree with that.

The Court: Well, it is really a matter for you anyway.

Mr. Kuntz: Well, we are not objecting, but as far as a concession, Mr. Phillips feels that way and I don't feel to the contrary; I will say that.

The Court: Well, go ahead.

Mr. E. H. Bloch: I want to clarify my own position here in view of my father's statement. I still adhere to the [fol. 711-A] original offer that I made as implemented by the statement that I have made up here at the bench.

The Court: All right. I will handle it.

Mr. Sappol: I would like to have my position known.

The Court: I will give you a chance to say what you want to say.

[fol. 712] (The following proceedings were resumed in the presence and hearing of the jury.)

The Court: Now, there is a matter of some concern to me personally, that the witness is about to testify to, and the concern I have is as to the method that this testimony should be handled.

Now, Mr. Sappol—Mr. Cohn was about to take detailed proof on certain descriptive matters concerning the atom bomb which the witness contends was turned over to the defendant Julius Rosenberg; that while it might not be in the best interests of the country, was yet a matter that is necessary in the trial of a case and under our democratic form of government.

Mr. Bloch, I understand that you are willing to concede the testimony concerning that particular phase of it, is that correct?

Mr. E. H. Bloch: I was willing to do this, your Honor—I want to restate it very clearly. I thought that in the interest of national security, any testimony that this witness may give of a descriptive nature concerning the last Government exhibit might reveal matters which should not be revealed to the public.

The Court: Therefore?



Mr. E. H. Bloch: And, therefore, I felt that his testimony on this aspect should be revealed solely to the Court, to [fol. 713] the jury and to the counsel and not to the public generally.

The Court: Well, now Mr. Saypol, do you wish to say something?

Mr. Saypol: Yes. I feel free to address myself to the subject in the light of the fact that the situation as it exists, is not of my creation but that of one of counsel for the defendants. The character of the proof has been offered, this witness and the preceding one, has been the subject of very grave consideration by my colleagues, myself, by agencies of the Government, including the Department of Justice, the Atomic Energy Commission and the Joint Congressional Committee on Atomic Energy.

We are cognizant that there had to be balanced on the one hand, the disclosure of the type of information that has come out, and is about to come out, in order to supply the requirements of the Constitutional Rights of defendants to full confrontation. That subject has been expended upon by our courts. That weighed against the national security. That matter is of such gravity that the Atomic Energy Commission held hearings, at which I was represented, as did the Joint Congressional Committee, and representatives of the Atomic Energy Commission have been in attendance here at the trial, as your Honor knows, [fol. 714] have been in constant consultation with me and my staff on the subject.

At least one of the counsel for the defendants, made the offer to preserve the confidential character of this information. I think I stated before that solely for the purposes of this trial, the Atomic Energy Commission had released—had authorized the release of this information so that the Court and the jury might have it. If all counsel for the defendants had joined in Mr. Bloch's suggestion it would have been ideal. In the presence of a conflict amongst the defendants as the prosecutor, my view is that of my colleagues, where I say frankly that the decision is not one that I would freely care to make myself, although I am not unequipped to do so, nor am I hesitant, but it has unanimity amongst us. Since there is no con-

currence among counsel for the defendants, it is my view that we should go forward with the proof as it has proceeded, unless the Court of its own volition, bearing in mind, as I know it will, the Constitutional factors as they relate to the defendants, itself chooses to make an appropriate direction.

The Court: Ladies and gentlemen, in as plain and simple language as I can possibly put it to you, under our form of government, we do not have what has been characterized as "star chamber proceedings", where a defendant is not [fol. 715] permitted to hear the testimony against him or only a portion of testimony is given and certain portions are withheld. When the defendant is put on trial, under our form of government, I am happy to say, he is entitled to full confrontation, and that means confrontation of all the evidence which the Government contends to prove the guilt of the defendant or defendants.

Now, there are some courses open to the Court and I am about to pursue one of these courses reluctantly, but necessarily so. I am going to ask spectators in the courtroom to please leave the courtroom during the course of the taking of these proceedings on the balance of this testimony.

Mr. E. H. Bloch: If the Court please, would this be an appropriate time to take a recess?

The Court: We will take a short recess.

Mr. Fabricant: If the Court please, may I approach the bench? I was about to ask whether I am included or excluded in the instruction you have given?

The Court: You have gone over this with your client, have you?

Mr. Fabricant: I don't know everything that he has said.

The Court: I think perhaps you had better be excluded [fol. 716] on this portion of testimony.

Mr. Fabricant: That is what I wanted to ask.

(Short recess.)

(The following proceedings were had in the absence of the witness, the jury and the general public.)

The Court: Gentlemen, the press sent some representa-



tives in before and they are rather agitated over the fact that I have included them in the barring order.

Now, I would like to have an expression of opinion on that.

Mr. E. H. Bloch: Now, unless Mr. Saypol wants to gather his thoughts—I think he does as I see his expression—I would like to articulate what I think, which is really in confirmation of what I said before, at least in what is implicit in what I said before.

Mr. Saypol: Will you stop for a minute, Mr. Bloch?

Mr. E. H. Bloch: Yes, certainly.

Mr. Saypol: I am sorry to interrupt, but I want the Court to know that present in the courtroom, in addition to my staff, representatives of the FBI—

Mr. Phillips: A little louder please, Mr. Saypol.

Mr. Saypol: I say in addition to my staff and myself are present, in the courtroom, representatives of the Federal [fol. 717] Bureau of Investigation, the Atomic Energy Commission who have been in attendance, Mr. Nicholson of the Department of Justice, and Mr. Sheehy, representing the Joint Congressional Committee, and I take it that it is appropriate in the light of the Court's ruling that they be in attendance.

The Court: I am dealing with another subject, and I am not prepared to discuss that now. I am directing my attention to something else entirely. We are not yet dealing with the testimony. The question now is whether or not the press should be barred. I think Mr. Saypol, perhaps you ought to discuss it with the representatives of the Atomic Energy Commission.

Mr. Saypol: Would your Honor allow me a moment?

The Court: Yes.

Mr. E. H. Bloch: I will hold my remarks in abeyance.

(Conference off the record.)

Mr. Saypol: I would be agreeable to that, depending upon their good judgment, and I might say to the Court that I am informed that Senator O'Connor is outside and I would like to ask leave—

The Court: Mr. Benson, will you ask the press to come back before we bring the jury back.

Mr. Saypol: Senator O'Connor, may he come in? [fol. 718] The Court: Ask Senator O'Connor to come in, too.

Mr. E. H. Bloch: I may say to the Court that I am in agreement with Mr. Saypol's position.

The Court: You agree with his position.

Mr. E. H. Bloch: You want the press excluded.

Mr. Saypol: No, we want them in.

Mr. E. H. Bloch: Oh, I am sorry, then I withdraw my remarks.

Mr. Saypol: Will you join in that?

Mr. E. H. Bloch: No, I did not understand you. My position is that I think the press ought to be excluded in the prohibition.

The Court: In the prohibition?

Mr. E. H. Bloch: I believe so; otherwise I believe the purpose would be defeated, unless the press is enjoined to secrecy.

The Court: No, they won't be enjoined to secrecy. They will be enjoined to good taste.

(At this point members of the press reentered the courtroom.)

The Court: Mr. Murphy, are there any other members of the press who want to come in?

Mr. Murphy: I can get them in in a moment.

The Court: Will you get them?

[fol. 719] Mr. Murphy: Yes.

(Mr. Murphy leave the courtroom and returns with other members of the press.)

The Court: May I say to the members of the press that I have considered the question of the press being present during the period of the taking of this part of the testimony. My personal feeling in the matter is that all of this testimony that is anticipated has probably fallen into the hands of those from whom we are trying to keep the information. However, I personally can't be certain of that fact and whatever course is followed is not a certain course on the matter. However, there has been a discussion here between Mr. Saypol, and I take it representatives



of the Atomic Energy Commission on the subject of whether the press should be present, and it has been resolved generally that the press should be here. However, we are going to trust to your good taste and your good judgment on the matter of publishing portions of this testimony.

Mr. Saypol: May the record show that the defendants are agreeable to that?

The Court: Are the defendants agreeable to that?

I do not think it has anything to do with the agreement of the defendants or not, Mr. Saypol.

[fol. 720] Mr. E. H. Bloch: That is just what I was going to say, but if the record wants to record my views, may I state that I don't consider this entire question involves a question of law.

The Court: I agree.

Mr. E. H. Bloch: And therefore—

The Court: It does not involve any question as to whether the defense is agreeable or not. It is a decision which I am making and I have a responsibility for that.

Mr. A. Bloch: We have no objection to your Honor's attitude in the matter.

Mr. Kuntz: Could I state so that it is clearly on the record that the defendant Sobell, his counsel, have no objection to the exclusion of the public or anybody else that your Honor desires to exclude or to include.

The Court: Have you had a chance to reconsider the question as to whether or not any of this testimony should be taken and whether or not we can't stipulate on the question that it was secret and confidential matter and pertaining to the national defense?

Mr. Kuntz: Well, Mr. Phillips and I are in complete agreement that we would not be defending the rights of our client properly by stipulating any such thing. We feel that our national defense is secure only in so far as [fol. 721] we secure the liberty of our present client, and tomorrow the next client, and so on, and because of that we feel that a confession of that kind would not be in the best interests of the defense of our client, not because of the nature of the testimony or anything of that kind.

The Court: All right.

Mr. A. Bloch: And I want to state on the record, that so

far as my son and myself are concerned, we would be willing to stipulate.

The Court: I understood that to be your position.

All right, let us have the jury back.

[fol. 722] Mr. Saypol: May I apprise the Court of the fact that there is also present, in the court, a representative of the Department of Justice, a representative of the Joint Congressional Committee on Atomic Energy, a member of the United States Senate. I take it that is agreeable?

The Court: That is agreeable.

Mr. Saypol: Now I am advised that the Senator has left. So that reduces the number present.

(The following took place in the presence of the jury:)

By Mr. Cohn:

Q. Now will you tell us just what happened, Mr. Greenglass, after you handed this sketch and the descriptive material concerning the atomic bomb to Rosenberg? What did he do, what did the others there do?

A. Well, he stepped into another room and he read it and he came out and he said "This is very good. We ought to have this typed up immediately". And my wife said, "We will probably have to correct the grammar involved", because I was more interested in writing down the technical phrases of it than I was in correcting the grammar. So they pulled—they had a bridge table and they brought it into the livingroom, plus a typewriter.

Q. What kind of typewriter?

A. A portable.

[fol. 723] Q. Then what?

A. And they set that up and each sentence was read over and typed down in correct grammatical fashion.

Q. Who did the typing, Mr. Greenglass?

A. Ethel did the typing and Ruth and Julius and Ethel did the correction of the grammar. While this was going on, sometimes there would be stretches where you could do—there wasn't too much changing to be made, and at this time Julius told me that he had stolen the proximity fuse when he was working at Emerson Radio.



If he wanted to see them in person he would put a message in there and by pre-arrangement they would meet at some lonely spot in Long Island.

Q. Did he mention anything else along those lines?

A. Well, he—

Q. Let me ask you this, did he mention any other projects, Government projects concerning which he had obtained information?

A. He once stated to me in the presence of a worker of ours that they had solved the problem of atomic energy for airplanes, and later on I asked him if this was true, and he said that he had gotten the mathematics on it, the mathematics was solved on this.

[fol. 736] Q. Did he say from where he had gotten this?

A. He said he got it from one of his contacts.

Mr. E. H. Bloch: If the Court please, that last answer, I wonder whether the witness could clarify who was meant by him when he said "they".

The Witness: "They" meaning scientists in this country.

Q. Now, what did you do in August 1949 when you terminated your business association with Rosenberg?

A. I got a job.

Q. Where did you obtain that work?

A. I got a job at Arma Engineering Corporation in research and development, model shop.

Q. Did you continue to see Rosenberg and your sister from time to time socially?

A. I did.

Q. Mr. Greenglass, do you remember the month of February, 1950 last year?

A. I do.

Q. Did you see Rosenberg in your apartment on the day in February, 1950?

A. I did.

Q. Now, before I ask you for the conversation on that date—

Mr. Cohn: Your Honor, I might say I have one more topic left which I do not think I can complete this afternoon; I think I can complete it fairly early in the morning. I do have one or two things which I omitted in the course of my

[fol. 737] examination today. I wonder if I can go back and go over them before recess?

The Court: Go ahead.

Q. You told us on Friday afternoon, Mr. Greenglass, about the atomic explosion that took place at Alamogordo, New Mexico, is that correct?

A. That is correct.

Q. In July of 1945?

A. That is right.

Q. Did you ever furnish any information concerning that atomic explosion to Rosenberg or to Gold?

A. Yes, I furnished information to Gold. I stated to Gold—

Mr. E. H. Bloch: Could we have the time fixed, please?

The Witness: June, 1945.

Q. You say you stated to Gold. Did you state it verbally or was it part of the written report you gave Gold?

A. Part of the written report.

Q. Will you tell us what you put in that report concerning this explosion?

A. I had told him that the explosion at Alamogordo was to be an equivalent amount of H. E., as they thought the atom—the nuclear fission would amount to; in other words, I had thought at the time that it was going to be an H. E. explosion at Alamogordo.

Q. Did you put that information in this report?

[fol. 738] The Court: By "H. E." you mean heavy explosive?

The Witness: High explosive.

Q. Did you put that information in this report?

A. That is right.

The Court: That was before the explosion had taken place?

The Witness: That is right.

The Court: How long before the explosion?

The Witness: About a month before—it was a little more than a month before.

Q. Now, did Rosenberg ever say anything to you about any reward that he had received from the Russians for the work that he had been doing?



A. He stated that he had gotten a watch as a reward.

Q. Did he show you that watch?

A. He did.

Q. Did he tell you that he had received that watch?

A. I don't recall that.

Q. Did he mention anything else that he or his wife received from the Russians as a reward?

Mr. E. H. Bloch: Now, Mr. Cohn, I was wondering whether you would fix the time of this last watch incident.

Mr. Cohn: I will try to do so.

Q. Can you remember when Rosenberg told you about [fol. 739] the watch?

A. I believe it was in January, 1945.

Q. During your furlough in January 1945?

A. Yes.

Q. Now, did he ever mention anything else that he or his wife had received as a reward from the Russians?

A. His wife received also a watch, a woman's watch, and I don't believe it was at the same time.

Q. Your recollection is that she received that at a different time?

A. Later, at a later date.

Q. When were you told about a watch that Mrs. Rosenberg had received, do you remember that?

A. I don't recall when that was but I do recall that my wife told me of it.

Q. You got that information from your wife, is that right?

A. That is right.

Q. Now, was there anything else that they received which they told you about?

A. I believe they told me they received a console table from the Russians.

Q. A console table?

A. That is right.

Q. When did they tell you about that?

A. That was after I had gotten out of the Army.

Q. Did you ever see that table?

A. I did.

Q. At their home?

A. I did.

Mr. Cohn: I think this would be a very good stopping point, your Honor.

[fol. 740] The Court: All right. Ladies and gentlemen, we will recess until 10:30 tomorrow morning, of course with the admonition of the Court that you do not discuss this case between yourselves or with anybody else, nor permit anybody to discuss it with you. 10:30 tomorrow morning.

(The jury left the courtroom.)

Mr. Sappol: In respect to that portion of the record which your Honor ordered sealed, may we have leave to have that exposed in two copies: One for the Joint Atomic Energy Committee of Congress and one for the Atomic Energy Commission. Those are classified and they are marked secret.

The Court: That is the very discussion I am having with him—off the record.

(Discussion off the record.)

Mr. Sappol: I withdraw my demand or request.

(Adjourned to March 13, 1951, at 10:30 a. m.)

[fol. 741]

New York, March 13, 1951;  
10:30 a. m.

TRIAL RESUMED

(Jury present in the jurybox.)

DAVID GREENGLASS, resumed the stand.

Direct examination continued.

By Mr. Cohn:

Q. Mr. Greenglass, I think yesterday afternoon you told us that Rosenberg told you that he had received a watch from the Russians; is that correct?

A. That is correct.

Q. Now, did he tell you he received anything along with that watch?

By Mr. E. H. Bloch:

Q. You pleaded guilty did you not in this building to this charge?

A. I did.

Q. And would it refresh your recollection if I told you that you pleaded guilty in Room 318?

A. Yes.

Q. And would it refresh your recollection if I told you [fol. 866] that your lawyer was present at the time you pleaded guilty?

A. That is right.

Q. How many months ago—

Mr. Sappol: Just a minute. What is happening here? Is his recollection being refreshed or is he testifying. The form of the question was such that the witness can't give a clear answer. What transpired is a matter of record.

Mr. E. H. Bloch: All right.

The Court: Proceed.

Q. Now, does that refresh your recollection as to the date when you pleaded guilty?

A. I pleaded guilty to the charge.

Q. Was that many, many months ago?

A. I pleaded guilty to an indictment earlier and I pleaded guilty to this indictment. I withdrew the plea on the earlier indictment at the same time.

The Court: This is a superseding indictment.

Mr. E. H. Bloch: In other words, this is a superseding indictment.

The Court: Yes.

Q. Now, how many months ago did you first plead guilty to this charge of conspiracy to commit espionage? Do you remember that?

A. Back in last year.

[fol. 867] Q. Last year. Have you been sentenced?

A. I have not been sentenced.

Q. Do you believe that by giving testimony in this case that you will be helped in terms of the severity of the sentence to be imposed upon you by the Court?

A. The Court—it is entirely within the discretion of the Court to give sentence, and whatever I do is just—it depends on the Court and nothing else by the Court.

Q. Now I would be—I would ask you to be good enough to answer my question. Do you believe that the Court will be easier on you—

Mr. Cohn: Your Honor, I object.

Q. —because you are testifying here—

Mr. Cohn: Your Honor, I object.

Q. —the way you did?

Mr. Cohn: I object to the question as to form, the witness's belief.

The Court: I believe that what he is trying to get at is a motive for his testimony.

Mr. Cohn: Yes. I have no objection to a proper question.

The Court: So I will permit him to ask the question.

A. I don't believe that I in testifying will help myself [fol. 868] to that great an extent.

Q. When you say "to that great extent", would you like to clarify that for the jury?

A. To any great extent.

Q. Would you say to any extent?

A. To any extent.

Q. All right. Do you believe that by testifying here in this trial that you will help your wife?

A. I don't know what the Government has in mind with my wife and I can't answer for them.

Q. You know, of course, that so far nothing has happened to your wife in terms of any criminal proceeding—

The Court: That has been answered.

Mr. Cohn: It has been answered.

Q. —or brought against her?

The Court: You don't have to answer that.

Mr. E. H. Bloch: I respectfully except.

Q. Let me ask you, Mr. Greenglass, did you ever keep a memorandum book or diary?



A. No, I never did.

Q. So that when you testified here today and yesterday and the day before yesterday, you were relying upon your memory, is that right?

A. Upon my memory, yes.

Q. And solely upon your memory?

A. That's right.

Q. And when you drew the sketches—one of them I [fol. 869] believe in June, 1950 and the other two a day or two before you testified—and I think they are reflected and marked Government's Exhibits 2, 6 and 7—did you rely solely on your memory in making those sketches?

A. I did.

Q. Now, when was the last day that you worked at the Los Alamos project?

A. 1946, February.

Q. What month?

A. February.

Q. That was about four and a half years ago?

A. That's right.

Q. And you relied solely upon your memory?

A. I did.

Q. During all of your months in jail did anybody go over with you any subject matter which related directly to those sketches that were introduced in evidence here as Government's Exhibits 2, 6 and 7?

Mr. Cohn: I don't know what Mr. Bloch means "go over with you". I think if he would clarify that—

The Court: Try to clarify it for him.

Q. Did you draw any sketches for any of the FBI men or any agents of Mr. Sappol's staff prior to the time you came to testify here?

A. I did.

Q. Was that the one that has been marked Government's Exhibit 2?

A. No.

Q. How many sketches did you draw for them?

[fol. 870] A. They were the same sketches, the only thing I used the ruler to accomplish this. The others were free-hand.

Q. Freehand?

A. That's all.

Q. Now, were you given any reference books or textbooks while you were in jail since your arrest, relating to any scientific matter?

A. No. I didn't—nobody gave me any.

Q. Did you read any scientific books while you have been in jail?

A. Just science fiction.

Q. That is, of course, not a basic theoretical journal, is it?

A. No.

Q. That is a popular kind of scientific periodical?

A. That's right.

Q. Now, Mr. Greenglass, I believe you testified that you graduated from high school here in New York City?

A. Yes.

Q. And I think you testified that you went to Brooklyn Polytech?

A. Right.

Q. Is that correct?

A. Yes.

Q. How long did you go to Brooklyn Polytech?

A. Six months.

Q. And how many courses did you take during those six months?

A. About eight different courses.

Q. And did you fail—

[fol. 871] Mr. Cohn: Oh, I object to that, your Honor. What difference does it make?

Mr. E. H. Bloch: I am coming to a new subject now, your Honor.

The Court: I assume you are.

Mr. E. H. Bloch: Yes, and I wish you will bear with me, because I am going to connect this up.

The Court: All right.

Mr. Cohn: Well, I will let Mr. Bloch finish his question. That is as far as I will commit myself at the moment, your Honor.

The Court: Right.

Q. Did you fail in your subjects?

Mr. Cohn: I would now object to that, your Honor. I don't see the relevancy of whether he or anybody else failed in subjects might have and it is certainly not proper cross-examination.

The Court: Before you answer that question, let me ask you: These sketches that are in evidence, are they the product of your own mind? By that I mean, were you helped by anybody on the outside in drawing those sketches?

The Witness: Nobody else, just myself.

The Court: Did anybody tell you to change any line here or change any line there?  
[fol. 872] The Witness: Nobody told me anything like that.

The Court: Very well.

Now, you ask your question.

Mr. E. H. Bloch: Are you permitting it, your Honor?

The Court: Yes. What subject? Be specific.

Mr. E. H. Bloch: All right.

The Witness: I will tell the story.

Mr. E. H. Bloch: Look, Mr. Greenglass—

The Witness: I was quite young at the time, about 18, and I liked to play around more than I liked to go to school, so I cut classes almost the whole term. Simple.

Q. How many of the eight courses that you took did you fail?

A. I failed them all.

Q. And did you then go to Pratt Institute?

A. That's right.

Q. How long did you attend Pratt Institute?

A. I attended it for one semester and a half, and the half of the other semester I had to work at night, so I had to withdraw from my classes which was allowed by the school, and I went to work at night, and I did not fail those courses. As a matter of fact, I got good marks.

[fol. 873] Mr. E. H. Bloch: Congratulations.

The Court: Strike that from the record.

Q. Did you ever get a degree in science?

A. I did not get a degree.

Q. Did you ever get a B.S.?

A. I did not.

Q. Did you ever get an engineering degree?

A. I did not.

Q. From any recognized institution?

A. I did not.

Q. Have you pursued any other organized and formal courses, held under the auspices of a recognized educational institution, apart from the Brooklyn Polytech and the Pratt Institute courses that you have mentioned you took?

A. I did not.

Q. Do you know anything about the basic theory of atomic energy?

A. I know something about it, yes. I am no scientific— I am no scientific expert, but I know something about it.

Q. Did you ever take courses in calculus?

A. No.

Q. Differential calculus?

A. I did not.

Mr. E. H. Bloch: I am just looking for a piece of paper, your Honor.

Q. Or thermodynamics?

A. I did not.

Q. Or nuclear physics?

A. I did not.

Q. Or atomic physics?

A. I did not.

[fol. 874] Q. Or quantum mechanics?

A. I did not.

Q. Or advanced calculus?

A. I did not.

The Court: What is this all about? I haven't heard anybody—

Mr. Bloch: Why, if the Court please—

The Court: I haven't heard anybody testify to your complete list. I have heard some of those words used by Dr. Koski, but I haven't heard the rest of that.

Mr. E. H. Bloch: That is right, and the purpose of these questions is to cast—let me put it this way: The purpose



of these questions is to cast *out* upon the probability that this defendant, this witness, could have explained in his descriptions, as he said to Rosenberg and to others, the workings—

The Court: Very well, I have your answer. The charge here is not that he gave him everything that might have been accurate in every minute detail, but that he transferred secret material pertaining to National Defense.

Mr. E. H. Bloch: That is correct.

The Court: And whether he might have turned something over, miscalculating a figure or making an error here and there, is not material to the charge, Mr. Bloch.

Mr. E. H. Bloch: Except this, your Honor, that it goes [fol. 875] to his credibility. I agree with your Honor fully on the basic theoretical legal approach with respect to the charge, but I am asking these questions to impeach this witness's credibility.

The Court: How long is your list? I will permit you to go on.

Mr. E. H. Bloch: It is practically over.

The Court: All right, go ahead.

Mr. E. H. Bloch: And I might say I never took any of these courses.

Q. Have you read any basic works on any of the subjects that I have just asked you about?

A. No.

Q. Do you know what an isotope is?

A. I do.

Q. What is it?

A. An isotope is an element having the same atomic structure, but having a different atomic weight.

Q. Now, did you learn that in Los Alamos?

A. I picked it up here and there.

Q. When you came to Los Alamos, you were a machinist, were you not?

A. I was.

Q. What was your rating in the Army?

A. T/5.

Q. Had you, prior to the time you came to Los Alamos, done any work as a machinist in the Army of the United States?

A. I had.

Q. Where?

A. At a number of places.

[fol. 876] Q. Well, do you mind detailing them, and the length of time that you practiced the trade of machinist in the Army of the United States, prior to the time you got to Los Alamos?

A. I was a machinist at Fort Ord.

Q. For how long?

A. As long as the company was there, I was a machinist there.

Q. For how long was that?

A. Three months. I was a machinist at Southgate, California, in the General Motors Tank Arsenal.

Q. How long?

A. As long as the company was there, I was a machinist there.

Q. How long was that?

A. A period of four weeks.

Q. That is four months so far, right?

A. I was at the P. O. M., Pomona Ordinance Base, three months there; I was at Aberdeen Proving Grounds, three months there.

Q. That is seven; that is ten.

A. Okay, that is ten right there in the Army.

Q. All right.

A. And every other post that ever worked on, was in, in the Army, I worked as a machinist.

Q. Were you classified in the Army as a machinist?

A. I was classified—I had two classifications.

Q. I am talking about the first one, before your promotions.

A. Before my promotions? I was classified—when you originally come into the Army you have just a basic classification, which means you have taken basic training. After [fol. 877] that you have certain skilled classifications. I had two skilled classifications.

Q. What were they?

A. One was automotive machinist and one was machinist and toolmaker.

Q. And when you got to Los Alamos, were you an automotive machinist or a machinist?

A. A machinist.

Q. And you say that you first worked in a certain building called the "C" building—"E" building, I am sorry?

A. "E" building.

Q. Now, how many machinists besides you were in that building?

A. At the time, about four, five, maybe six.

The Court: Is this a convenient place to break off a recess?

Mr. E. H. Bloch: I think so.

The Court: All right, we will take our recess. May I see counsel, please.

(Discussion at the bench off the record.)

(Short recess.)

[fol. 878] Q. I believe, Mr. Greenglass, that before recess we were discussing your job as a machinist in the Army. Now at the E Building, how many other machinists were there besides you?

A. There was about four or five or maybe even six.

Q. And did they run up to as high as ten at times?

A. That's right.

Q. And you had an immediate supervisor, did you not?

A. I did.

Q. And his name was what?

A. His name was Demars.

Q. And his name was what?

A. His name was Demars.

Q. And besides Demars there was Sergeant Fitzpatrick?

A. That is right.

Q. And above Sergeant Fitzpatrick there was Dr.—

A. Kistiakowski.

Q. Is he the gentleman who testified here?

A. He is not.

Q. Now, when the E Shop moved into the Theta Building did the workers in the E shop remain as a departmental unit or were you joined or did you join with other machinists?

A. No, it was the same shop.

Q. Were there any other machine shops in the Theta Building?

A. No other machine shops in the Theta Building.

Q. Now when you were in the E Building the only persons or employees who were working in that building were the five or six or ten mechanics, machinists with [fol. 879] their supervisors, is that right?

A. That is right—

Q. Now, how about—

A. —in working in the building or in the shop? You said "building".

Q. Were there other employees working in the E Building?

A. Yes.

Q. How many others?

A. I can't tell exactly. There was laboratories all over the building.

Q. And how about when you moved into the Theta Building?

A. There were other employees working there, too.

Q. Was the Theta Building a bigger building than the E Building?

A. Well, there was more room for our group in it. It wasn't bigger.

Q. You mean it wasn't bigger physically?

A. It wasn't bigger physically.

Q. Were there more employees working in the Theta Building than in the E Building?

A. I don't know.

Q. Were there more machinists working in the Theta Building than in the E Building?

A. No.

Q. About the same?

A. That is right.

Q. Now with respect to the security regulations at Los Alamos were you searched at all when you came in to report to work in the morning?

A. No.

[fol. 880] Q. Pardon me?

A. No.



Q. Were you searched at all when you quit at the end of the day?

A. No.

Q. Were there any security police or guards around?

A. There were.

Q. Were they in the E Building?

A. They weren't in the buildings, no.

Q. Were they in the Theta Building—were they outside the building?

A. They were at the entrance to the building—at each entrance.

Q. When you came to work in the morning and when you left at the end of the working day was it necessary for you to pass through this screen of security police?

A. That's right.

Q. Did those security police look over any packages or any other thing that you may have had on your person either coming in or going out?

A. They did that.

Q. And were you frisked—do you know what "frisked" is?

A. I have learned.

Q. Well—you have learned. You learned that in jail. All right, then we both understand the term. Were you frisked when you came in to work in the morning or when you quit in the evening?

Mr. Saypol: I think Mr. Bloch ought to be relieved of any unconscious implication that he cast upon himself.

[fol. 881] Mr. E. H. Bloch: I didn't mean it; I didn't mean it.

Q. Frisk means somebody touching your person to find out whether you have something on your person, isn't that right? Isn't that the definition of frisk?

A. That is right.

Q. Now, did you at any time ever take out of the Los Alamos project to your home or to any quarters which you were using for dwelling purposes any blueprint or any sketch during any of the months or years that you worked at the project?

A. No, I didn't.

Q. How long did you continue to work as a machinist until you were promoted to the assistant foreman's position?

A. From about March, 1945—I still continued to work as a machinist.

Q. But you supervised other men?

A. Yes. I mean I still—

Q. You were what one would call a working foreman?

A. That is right.

Q. So that when your wife came down to visit you in Albuquerque, New Mexico, in November, 1944, and during the time when you received your first furlough in New York in January, 1945, you had not as yet been promoted to be an assistant foreman, is that correct?

A. When my wife was out there I was already.

[fol. 882] Q. No, maybe I misunderstood you. Let us clarify the record. When you became an assistant foreman, I believe you said sometime in 1945—maybe I didn't—

A. I said about March, 1945.

Q. March, 1945?

A. Yes.

Q. Your wife came out to see you for the first time?

A. Oh, in 1944, that is right.

Q. And your first furlough to New York was in January?

A. That is right.

Q. At that time you were still a machinist and you had not been promoted to be an assistant foreman or working foreman, is that right?

A. That is right.

Q. And while you were working as a machinist until the time you were promoted to be an assistant foreman, what color badge did you wear around the project?

A. I would like to explain that a little, Mr. Bloch.

Q. Certainly.

A. When I first came to the Project they had three color badges. There was a white, blue and red. Now, the blue badge was the one you were supposed to wear if you could know what you were working on but nothing further. The white badge knew practically everything. The red was where the person wasn't supposed to know anything of what was going on.

Q. Correct.

A. Now, these badges were changed sometime during the [fol. 883] Project.

Q. During when?

A. During the Project, during the year, that year.

Q. 1944?

A. 1945.

Q. No, no—all right.

A. Now wait, let me explain, and then I will go back.

Q. All right.

A. Now, they changed that. At that time they switched the blue to the red position so that if you had a red badge it was what you used to have when you had a blue badge. At the time you are talking of you had a blue badge which was the equivalent later on of the red badge.

Q. So there was a white badge in 1944 and that badge was worn by the top scientists, the real top men in the Project, is that right?

A. Yes.

Q. The more important officials?

A. Yes.

Q. All the most important officials?

A. That is right.

Q. And then came those who were employed regularly at the Project, and this is quite rough, people like you?

A. Yes.

Q. And they wore the blue badge?

A. That is right.

Q. And people who came in sporadically or temporarily to do work on the Project wore the red badge?

A. That is right.

[fol. 884] Q. Let us fix our minds on these badges because I want to cover 1944 on. During that year did you procure any information concerning the work at the Los Alamos Project from anybody outside the E Building or the Theta Building?

A. From November 29th after I had seen my wife until January 1, I did get information.

Q. You did? You were still wearing the blue badge?

A. That is right.

Q. Now I want you to name one scientist from whom you received unauthorized information?

A. By that you mean that he knowingly gave me the information?

Mr. E. H. Bloch: Now may I have Government's Exhibit 1, please.

Q. Now, Government's Exhibit 1 in evidence deals with the regulations governing the conduct of employees at the Los Alamos Project, does it not?

A. That is right.

Q. This you identified. Is there anything in these regulations which prohibit an employee from giving information to another employee outside the official routine run of business?

Mr. Cohn: Now, your Honor, I think the exhibit speaks for itself. I tried to inquire into the contents of the exhibit and was stopped on the ground that the exhibit does speak [fol. 885] for itself, and I think it does in exact terminology.

The Court: No. That is a proper question.

(Last question read.)

A. I don't know exactly what it says in there because I haven't read it recently, but I suppose it does state something to that effect.

Q. Now, you stated that after your wife came to visit you around November 29, 1944, until the time you got your first furlough in January, 1945, you did get information outside what would come to you in the official discharge of your duties as a machinist, is that right?

A. That is right.

Q. And did you procure that information from somebody who was not assigned permanently to the E—I think at that time you were in the Theta Building, weren't you, at the Theta Building?

A. Well, first of all a scientist—it was anybody who was employed up there as a scientist. That could be a G. I., a civilian, and I did procure for instance the fact that Baker was Bohr from a man who happened to be a scientist.

[fol. 886] Q. What is the name of that GI?

A. William Spindel.

Q. Did you procure any information, to which you believe



you were not entitled, from any scientist during this period from November 29, 1944, to January 1, 1945?

Mr. Cohn: I object to that.

The Court: Upon what grounds?

Mr. Cohn: I don't think it is relevant.

The Court: All right. What is the ground? I don't see the relevancy as to whether he got the information to which he didn't think he was entitled?

Mr. E. H. Bloch: This is on the question of credibility, your Honor. This man is testifying that he is relying solely upon memory and he testified that he procured certain information.

The Court: You say it is on the question of credibility?

Mr. E. H. Bloch: That is right.

The Court: You may go ahead. What is your question now? Put it again.

Mr. E. H. Bloch: Will you read the question, please.

(Question read.)

A. I told about Bohr.

Q. You told us about Bohr already. You said you got [fol. 887] that information from this GI, whose name is Spindel. Now I am asking you if you got any information from any scientist working on that project during that period?

A. I was in the room when I heard discussions about implosion effect experiments, implosion effect of lenses, while some scientists were discussing it in the office of the building I was in.

Q. Were you lawfully in that building at the time?

A. I had come in to pick somebody up to go to lunch.

Q. You weren't there unlawfully?

A. No, there was nobody telling me not to go into this room or that room. There are certain restricted areas.

Q. Yes, but you couldn't wander around the development, could you?

A. All over the tech area, it was perfectly all right for me to go.

Q. Even when you are machinist?

A. Absolutely. In my case, in my building, in my group, I don't know anybody else.

Q. We are confining ourselves to the time before you became assistant foreman.

A. Yes.

Q. Any other incidents?

A. You said "that month". Well, that is all I remember for that month.

Q. Now then after you returned from New York on your first furlough, did you receive any information from any [fol. 888] scientist on that project outside of information that would come to you through the discharge of your official duties?

A. Yes, I did.

Q. And from whom?

A. Well, it was in the theoretical physics department.

Q. Where was that located?

A. In the Tech area.

Q. What building?

A. "T" building, probably.

Q. "T" building?

A. Probably, and this man was a mathematician who worked there, gave me a pretty good idea of what the lenses were about; he knew the physics, I mean, involved.

Q. Was this in the course of an official lecture that you attended?

A. No.

Q. This was in a private discussion?

Mr. Saypol: Just a minute, Mr. Greenglass. May I voice an objection at this stage to certain phases of this cross-examination, in what I consider to be the selective use of certain words which might tend to give the impression that only a given type of information was restricted, and therefore there could be no illegal transfer of that material. In the first place, when counsel addresses himself to the witness, inquiring as to whether any information was obtained from scientists, or a scientist, the narrow implication is that otherwise it was free to be received by him. For the sake of the discussion and my argument, and bearing in [fol. 889] mind an observation made by your Honor a moment before, I conceive, it is my theory of the case, that one like this defendant could find material in that project in a wastepaper basket, discarded in violation of the regu-



lations—they were to be burned—and that would come within the purview of the law.

Now I request the Court that counsel be directed to address his questions to information obtained in violation of these regulations which are contained in Government's Exhibit 1, without restriction by the use of such words as "scientist".

Mr. E. H. Bloch: Well, if the Court please,—

The Court: I don't need any argument.

Mr. E. H. Bloch: All right.

The Court: As I understand it—and I think it is perfectly clear to the jury—everything was restricted there, everything. Is that right, Mr. Bloch?

Mr. E. H. Bloch: Everything was restricted except what an employee necessarily was permitted to find out in connection with the discharge of his official duties. In other words, may I just say this: suppose a machinist is working on a blueprint; naturally that was restricted in the eyes of the world, but it was not restricted to him. I am talking about unlawfully.

[fol. 890] The Court: It was restricted beyond him.

Mr. E. H. Bloch: Yes, that is right.

The Court: So that as to that particular limited piece of information, he was permitted to know it, period.

Mr. E. H. Bloch: That is correct. Now I am inquiring as to information received by this witness, to which he was not entitled in the discharge of his official duties. I tried to make that as clear as possible, and I now restate that that is the sole purpose of these questions.

Mr. Saypol: May I make a further observation? The very language of these regulations, both in respect to receiving information from unauthorized persons or unauthorized information, or giving unauthorized information or giving it to unauthorized persons, demonstrates the broad generality of the restricted area.

The Court: Proceed.

By Mr. E. H. Bloch:

Q. Now, I believe on your direct examination you told us, in substance that you snooped around to get information; isn't that right?

The Court: Don't shake your head. You had better answer.

A. Oh, yes, yes.

[fol. 891] Q. And you would make it your business to enter into a conversation or overhear conversations where you could pick up information?

A. That is right.

Q. Is that correct?

A. Yes.

Q. Now, could you give us just two instances of information that you picked up that way?

A. I came into a room; there was a piece of material on the table; I picked it up and I said "It is an interesting piece of material and it is interestingly machined." The man I spoke to and another man was there said, "Oh, that is neutron source," and explained how it was used, in a conversation. That is one way. That is one instance.

Q. Was that in the tech area?

A. It was in the tech area.

Q. All right, give me another instance—just pardon me, Mr. Greenglass. I don't like to break the trend of thought, but just for clarity, in connection with this first illustration of how you picked up information; were these men, who told you about the fact that this piece of material would have something to do with neutrons, were these men, these employees, top scientists?

A. Now, look, every scientist had a white badge there.

Q. Were they white badge men? Let me put it that way.

A. One was a white badge man; one wasn't.

[fol. 892] Q. All right, now go to the second instance.

A. Another instance. A man came in to me with a sketch—with a piece of material; said "machine it up so that I would have square corners, so I could lay out a lens; come over and pick it up." I would go over to his place; he was a mathematician, a scientist, he had laid it out, and I would say, "What is the idea"? He would tell me the idea.

Q. Tricky like, eh?

A. Nothing tricky about it.

Mr. Cohn: Your Honor—



The Court: Strike that out.

Mr. Cohn: I think that should be stricken, your Honor.

Q. Well, you meant to trick, did you not, the person who was talking?

A. Well, I meant to get the information from him.

Q. By trick, didn't you?

Mr. Cohn: Your Honor, we have had that many times.

Mr. E. H. Bloch: All right, I will withdraw it, but I just wanted the Court to know that I wasn't using words loosely.

Mr. Saypol: That is why it was objected to, because it wasn't being used loosely.

[fol. 893] The Court: All right.

Q. Now, then, when you were a machinist, were you given a blueprint now and then to work on?

A. That is right.

Q. And were you ever given, as a machinist, a job to do without cooperation with other machinists?

A. Surely.

Q. Now, the job that you did was only a part, however, of the matter, or the material that was to be constructed in connection with an over-all blueprint; isn't that so?

A. Sometimes, yes. Sometimes it was something by itself.

Q. And when it was something by itself, wasn't it just the construction of some little metal bar or some other little appliance?

A. A lot of little appliances go into making something bigger.

Q. That is correct; you didn't make all the appliances that went into this lens, did you?

A. Of course not—in the lens mold, I made a complete lens mold.

Q. You yourself made a complete lens mold?

A. That is right.

Q. Did you make the complete lens mold that was subsequently assembled at the remote project, at which the detonation went off?

A. I can't tell.

[fol. 894] Q. You don't know that?

A. I don't know that.

Q. How long did it take you to make the complete lens mold?

A. Well, the flat type lens mold would take me about twenty-four hours of work.

Q. Were other machinists likewise trying to construct flat lens molds?

A. Certainly.

Q. And did they also work from blueprints?

A. Of course.

Q. Did you ever make a copy of any of the blueprints that were given to you to work on?

A. I made a copy for my own use in the shop.

Q. Did you ever make a copy of any blue print and take it out of the project?

A. I did not.

Q. Did you ever steal any documents, whether it be blueprints or any other matter, or even including any material, and take it out of the project to your home?

A. I did not.

Q. Or to the place where you stayed?

A. I did not steal anything of that nature. I made a radio; I took the radio out; I showed them the radio on the way out, and it was perfectly permissible to do that. I made a phonograph attachment; I brought that out with me, too.

Q. So that we can be very clear about this now, when you made the sketches for the Government, and particularly the sketches which have been marked as Government's exhibits 2, 6 and 7, you relied solely upon what [fol. 895] you remembered you had done and the knowledge that you had accumulated while you were working at Los Alamos prior to 1945; is that right?

A. Prior to 1945?

Mr. Saypol: 1946.

Q. 1946.

A. That is right.

By the Court:

Q. And would you give the same reply with respect to the sketches that you said you turned over to Rosenberg, and that was also a reconstruction of what you carried in your mind of the type molds, that is, as to 2 and 6 anyway, as to the type molds you had made, and then as to the process which is incorporated in 7?

A. That is correct.

By Mr. E. H. Bloch:

Q. And that was true also of the material that you said you turned over to Gold?

A. That is correct.

Q. Now, tell me, when you worked on the lens mold, or, in fact, when you worked on any piece of apparatus while a machinist, were you given any lectures as to the functions of the particular piece that you were working on and constructing? This was while you were a machinist now.

A. What do you mean by lectures; formal lectures, in a group?

Q. Let's separate all the possibilities. Were you ever [fol. 896] given any formal lectures?

A. No.

Q. Were you ever given any informal instructions?

A. Yes.

Q. Concerning their function?

A. Yes.

Q. Now were you ever told their functions in relation to the complete object that was to be constructed?

A. There are different types of lens molds. Some were not used on the bomb itself, and some were just used for experiments.

Q. How many lens molds in all would you say were constructed at the Theta building while you were working there?

Mr. Cohn: I object to that as irrelevant, as to how many lens molds were constructed at the Theta building.

The Court: Need we have that?

Mr. E. H. Bloch: He said "many." I will be satisfied with the answer "Many."

The Witness: Many.

[fol. 897] Q. Now Mr. Greenglass, can you sketch for us every lens mold upon which you worked or which was constructed at the Theta shop in Los Alamos?

A. Not everyone but I can draw—sketch a good deal of them.

Q. A good deal of them—showing the developing process and the improvements that had been made; can you do that?

A. The sketches are—well, that was\*only the improvement in the curve, and I didn't know that. The curve looked the same to me—maybe a little flatter or a little more tapered but I couldn't tell which curve was—I mean it would be very difficult to tell which one was the improvement over the other.

Q. You did not even know the formula for the curvature, did you?

A. That is exactly correct.

Q. What? You had to be a scientist to know the formula, isn't that right?

A. That is right.

Q. Now, I would like to direct your attention to the time that you said you came to Rosenberg's house in September, 1945. I think you testified—again check me; I am doing this in substance and rather roughly—that you and your wife came there sometime in the evening?

A. September, 1945 I came in the afternoon.

Q. Well, when was the time that this Ann Sidorovich was there?

A. That was January, 1945.

Q. All right, then let us forget about September and [fol. 898] go to January.

In January, or the early part of January, I believe you testified you came to the Rosenberg house in the evening and you met Ann Sidorovich?

A. That is right.

Q. You said you knew her husband?

A. I had known her husband.

Q. Prior to the time that you were introduced to her that evening?



A. That is right.

Q. And that was the first time you met Mrs. Sidorovich, is that correct?

A. That's right.

Q. Were you told where Mrs. Sidorovich lived at the time you were introduced to her?

A. I don't believe that I knew that at the time.

Q. Now you say you did know Mr. Sidorovich?

A. That's right.

Q. How often had you met him prior to the time that you first met his wife?

A. Well, Julius had introduced me to him and I had met him while I was going to school. I met him—I seen him around school and we talked together a number of times.

Q. Don't you—

A. I met him on buses.

Q. Would you want to change your answer if I suggested to you that the Sidorovichs did not live in New York City in January, 1944?

[fol. 899] A. It wouldn't—make any difference—

Q. In 1945, I am sorry.

A. It wouldn't make any difference to that because I met her there. I did not know anything about where they lived.

Q. Now we are talking about time. You may have met her there but I am trying to focus your attention on the time. Is it your testimony unequivocally that in January, 1945 you met Ann Sidorovich at the Rosenberg's home in Knickerbocker Village?

A. That is correct.

Q. All right. Now I think you testified that Julie Rosenberg told you that he had received from the Russians or from the Russian Government, a watch. Did you ever see that watch?

A. He showed it to me.

Q. Describe it?

A. It was a round watch, round dial watch with a sweep second hand.

Q. With what?

A. A sweep second hand—round faced watch with a

sweep second hand, and it had—at the time he first showed it to me I believe it had a leather strap.

Q. Did you ever see the watch that you say Ethel got from the Russians?

A. I might have seen it but I didn't—I didn't—

Q. Didn't what?

A. Well, I wasn't told that that was the watch.

Q. Can you describe the watch that you saw on Ethel's [fol. 900] hand or any time when she had a watch on her hand in her possession?

A. I can't describe that watch, no.

Q. I think you also said that the Rosenberg's told you or Julie Rosenberg told you that he received a console table from the Russians. Did you ever see that console table?

A. I saw that console table.

Q. Describe it?

A. Well, they had it up against the wall. It is a dark color, mahogany probably. It is wider than that table right there (indicating)—I mean the length.

Q. Wider than which table? Do you mean the table against which I am standing (indicating)?

A. Yes. It is longer—it is a little bit wider and it is maybe four feet long, maybe three and a half, four feet long.

Q. Mr. Greenglass—

A. And it is—

Mr. Cohn: Wait. I would like him to finish the answer.

Mr. E. H. Bloch: Yes, I want it.

Q. But you are a machinist, you understand that descriptions of lengths don't show up by this table, because that doesn't appear in the record. Then tell us how long it was and how wide it was?

A. I would say it was about—you see, the top of the console table, one side lifted up so it made an "L" if you had it against the wall, and that is the way I saw it. [fol. 901] With the "L" up against the wall, it was about three and a half feet, maybe three feet long (indicating), except that is the width when the console table is opened



(The following took place in open court.)

JOHN A. DERRY, called as a witness on behalf of the Government, being first duly sworn, testified as follows:

The Court: Ladies and gentlemen, we are coming to another portion of testimony where I feel compelled to clear the courtroom. As I told you once before and I repeat, during the course of some cases, particularly a case of this character, while it might be in the interest of the country that we do not hear certain portions of testimony, yet, under our form of jurisprudence the defendants are entitled to absolute confrontation of every witness and every piece of evidence that is offered against them.

So with that in mind I am going to ask everybody but the press to leave the courtroom.

(All spectators leave the courtroom.)

The Court: I might also say, Mr. Stenographer, that with respect to that portion of the testimony that deals with the operation of the atomic bomb there is to be no transcription [fol. 1319] made, and your stenographic minutes are to be considered impounded. Of course, if any counsel wants to have it read back for purposes of examination, it may be made available for that purpose.

Mr. Sappol: Would your Honor direct the clerk to unseal the testimony of Greenglass so that I may use it in my examination?

The Court: Very well.

Mr. Sappol: Let the record show that the direction is given.

The Court: You mean the testimony with respect to the atomic bomb?

Mr. Sappol: Yes, if the Court please. I haven't got a transcription of Greenglass' related testimony, and I will have to ask Mr. Slavin to read for me at the appropriate time, or to get his colleague, whoever it was who took the notes to read it.

Direct examination.

By Mr. Sappol:

Q. Mr. Derry, you are an electrical engineer, are you not?

A. Yes, sir.

Mr. Sappol: I should like the record to show that representatives of the Atomic Energy Commission are present in the courtroom and I take it the Court will allow them to be here?

The Court: Yes.

[fol. 1320] Mr. Sappol: I don't think they need be identified unless the Court desires.

The Court: No. Are they the same men who were here before?

Mr. Sappol: Yes.

The Court: They have been identified once before.

Q. What college did you graduate from?

A. I graduated from Rose Polytechnique Institute, Terre Haute, Indiana, June 1929 with degree of Bachelor of Science in electrical engineering.

Q. Thereafter did you obtain employment?

A. Immediately after leaving this school I worked for the Ohio Bell Telephone Company in Cleveland for about five months, and from there I went with the Pennsylvania Railroad Company on the electrification construction between New York and Washington. I was with them until January 1936. Would you like to have me go on?

Q. Yes, you might. It will make it a little easier.

A. At that point I became employed by the Rural Electrification Administration, United States Government, on engineering, designs, provision, construction and operation of rural electric lines. I was with them until my reserve commission that I got when I went to school was activated in April 1942.

[fol. 1321] Q. So you became an Army officer?

A. I became an Army officer.

Q. With what rank?

A. I came in as a 1st Lieutenant.

Q. How did you come out?

A. Lieutenant Colonel.



Q. When?

A. August 1946.

Q. So that from 1942 to 1946 you were in the United States Army?

A. Yes, sir.

Q. Did you receive an assignment in December of 1942?

A. I did. I was assigned to the Manhattan Engineer District.

Q. How long did you continue there?

A. I was with them in one job or the other until I got out of the Army in August 1946.

Q. Well, until April 1944 you were at Oak Ridge, were you not, as assistant to the Area Engineer?

A. Yes, sir. When I went in the Army I went into the Chief Engineer's Office in Washington, and in December was assigned to the Manhattan Engineer District and went to Oak Ridge and was there until April 1944.

Q. Did you receive another assignment then?

A. Yes. I was assigned back into General Groves' office as his liaison officer working between Washington, between General Groves and the Los Alamos Laboratory.

[fol. 1322] Q. General Groves of course was—

A. Commanding General.

Q. Commanding General in entire charge of the development of this Project at both Los Alamos, or, rather, the Project that is denominated as the Manhattan Engineer Project, is that right?

A. Manhattan Engineer District.

Q. And what actually was the objective of that Project?

A. To develop and make an atomic bomb.

Q. In other words, research and the—

A. Research and development.

Q. —development and manufacture?

A. Manufacture and delivery.

Q. Just to supplement your background, after you left the Army, it is the fact, is it not, that from January 1, 1947 to September 1948 you were associated with the Atomic Energy Commission?

A. What were those dates?

Q. January 1, 1947 to September 1948?

A. Well, I am still employed by the Commission, but-

Q. What was your job?

A. My job during that period was technical assistant to the general manager.

Q. What was your job after that, until January of 1950?

A. I was assigned as special assistant to the director of production, handling special tasks for the director of [fol. 1323] production.

Q. Of the Atomic Energy Commission?

A. For the Atomic Energy Commission, yes, sir.

Q. And from January 1950 until November 1950, did you continue to be associated with the Atomic Energy Commission?

A. Yes. I went from the Production Division to the Division of Biology and Medicine and held the job there as executive officer to the Division of Biology and Medicine.

Q. What do you do today?

A. I am again special assistant to the Director of Production, handling special assignments.

Q. Let us now go back to April 1944; from that date until January of 1947, as liaison officer for General Groves, did you have an occasion to visit the Los Alamos Project?

A. Yes, I went out, I believe, on the average of about once a month.

Q. Was it known at that time as "Los Alamos", or did it have some other name?

A. No, we identified it as "Project Y".

Q. When you made these visits, how long would you stay? How long would your work require that you stay there?

A. Dependent on the amount of work I had at the time. It ranged from one day to six days, seldom longer than a week.

[fol. 1324] Q. In the performance of your work as liaison officer for General Groves, did you have anything to do with production problems at Project Y?

A. I did. My assignment as liaison officer was to keep General Groves informed of the technical progress of the research, development and production phases of the atomic bomb Project at Los Alamos. Then beyond that, I could go on and say that probably my—most of my work was taken up, since General Groves left me pretty much alone, and I reported to him when it was necessary, making sure



that the Los Alamos Project had, oh, ample opportunity to get their job done, by providing them with avenues of approach to other Government agencies, the defense establishment, other scientific laboratories.

Q. You acted as a liaison with other Government agencies in connection with problems—

A. Yes.

Q. —procedures?

A. Yes.

Q. In other words, you had to straighten out all of the inter-related bugs; is that what it comes to?

A. That was about the job, right.

Q. That was your job. How long did you continue that work?

A. I continued the job, working closely with the Los Alamos Project, right up to the end of the war. Toward the end of the war, as you know, we had a New Mexico test. I assisted in the planning of that test. Then after the [fol. 1325] test, I was General Groves' operation officer, if you want to call it that, for the combat operation in the Mariannas.

Q. To your knowledge, was the work and progress and everything associated with it of a classified character, from the standpoint of security?

A. Oh, the entire Manhattan Project was classified. Los Alamos was a little more classified than anything else.

Q. Do you recall while you were doing that work sometime in August of 1945, July or August, around that time, in the summer, there was a first test explosion or first explosion of an atomic bomb in that vicinity?

A. Yes.

Q. Tell us what knowledge you had of the preliminaries leading up to that explosion and the related facts in connection with the explosion?

A. Well, we started planning for it many months in advance of one of these things.

Q. Did you take part in those plans?

A. I took part in all of the planning. I visited Los Alamos many times, in assisting them in their planning, assisting them in their procurement of supplies and equipment and personnel. Because of my assignment in General

Groves' office, I did not go to the test; I stayed in Washington, but I was there in Washington when the operation [fol. 1326] took place in July, July 16, I think it was, 1945.

Q. Was everything associated with the preparation and the actual test classified?

A. Highly Classified.

Q. You say "Highly Classified"; "Highly Classified" is a secret?

A. Top secret.

Q. Is a Government secret?

A. Or top secret.

Q. During the year 1945, did you have occasion to see the actual atomic bomb which was being developed and constructed at the Los Alamos or the Y Project?

A. Many times.

Q. What was the occasion, or what were the occasions for your seeing these things?

A. In my connection, with my technical assignment with General Groves and the laboratory, I had to keep informed on the work and progress, be able to do the job properly.

Q. I take it, you likewise were informed of some of the experiments, many of the experiments incidental to the development of the atomic bomb?

A. I was.

Q. These, too, I take it, were the subject of reports, communications from you to General Groves, were they not?

A. They were.

Q. There has been testimony in this trial by a witness, David Greenglass, regarding the structure of the atomic bomb, and he likewise has identified a cross-section sketch of the bomb, which is Government's Exhibit 8 in evidence. [fol. 1327] I would like you to listen, Mr. Derry, while the court reporter reads the witness Greenglass' testimony as he gave it here, relating to the bomb, a description of the bomb connected with this Government's Exhibit 8, and then I shall ask you some questions.

Mr. E. H. Bloch: If the Court please, I object to this method of procedure. I think Mr. Saypol has stated that it is his purpose to have this witness corroborate Greenglass' testimony on this particular point, and I suggest very strongly that before this witness is given Greenglass'



testimony, he be asked to describe a cross-section of the bomb, and then, I say, it is for the jury to decide. I have no objection to the reading of the testimony right after this witness—

The Court: The jury will have to decide anyway, but they are entitled, on a subject as technical as this and a subject on which there is so little knowledge outside of the technical field, to have the help of an expert.

Mr. E. H. Bloch: Correct. I am not disputing that at all, your Honor. What I am saying is that I think it is unfair; I think it is leading and suggestive at this time to say to this witness, "Now, you read this testimony and tell us about this and that."

My suggestion is—and I think it the fair way of pro-[fol. 1327-A] ceeding—is to have the witness testify to what he considers to be, or describe a cross-section of the atomic bomb to the jury, and then if the jury desires, or if the Court instructs have Greenglass' testimony read right after he describes, or even during the course of his testimony.

The Court: It is overruled.

Mr. E. H. Bloch: I respectfully except.

[fol. 1328] By Mr. Saypol:

Q. Will you listen while Mr. Slavin, the reporter, reads the description.

(Previous testimony given by Mr. David Greenglass read by the Court Reporter.)

The Court: Doesn't that cover it?

Mr. Saypol: All right, Mr. Slavin, thank you.

Q. Mr. Derry, does the description as Mr.—

The Court: May I at this point say to the members of the press that I do hope that they will exercise the same good judgment that they exercised in publishing the information as it came from the lips of Mr. Greenglass.

Q. Mr. Derry, does the description as read by Mr. Slavin in conjunction with the sketch before you, Government's Exhibit 8, relate to the atomic weapon which was in the course of development in 1945?

Mr. A. Bloch: I object to the question on the ground that it is virtually a question of characterizing by one witness of another witness's testimony, and upon the further ground that this witness has failed to qualify as an expert on the ingredients and their functions contained in the statement just read to him.

The Court: Overruled.

Mr. A. Bloch: Exception.

The Witness: Would you read the question again, give [fol. 1329] me the question again?

(Question read.)

A. It does.

The Court: I believe you told us that you knew each and every detail of the construction of that weapon, that was your job?

The Witness: It was my job to know what went into the parts of it.

The Court: And you understood the entire subject matter, didn't you?

The Witness: Yes, sir, I did. It was my task that General Groves gave to me.

Q. And you still do understand it?

A. I still do.

Q. Does the knowledge as disclosed in the material read by Mr. Slavin, in conjunction with the sketch before you, Government's Exhibit 8, demonstrate substantially and with substantial accuracy the principle involved in the operation of the 1945 atomic bomb?

Mr. A. Bloch: I respectfully urge the same objection made to the original question put to the witness.

The Court: Overruled.

A. It does.

Q. From that testimony and from that exhibit you perceive clearly the structure of the weapon as it actually was?

A. I didn't get that question.

[fol. 1330] Q. That is, from the testimony as it has been read to you and from the sketch, Exhibit 8, can you perceive—



The Court: Can an expert.

Q. Can you—

The Court: I would say, can an expert in that particular field perceive.

Q. Can a scientist, and can you, perceive what the actual construction of the bomb was?

A. You can.

Q. To a substantial degree?

A. You can.

Q. Was this information classified at the time?

A. It was classified top secret.

Q. Is it still classified?

A. Yes, sir.

Q. Does this information relate to the national defense of the United States of America?

A. It certainly does.

Mr. A. Bloch: I object to it upon the ground that it is calling for a conclusion of the witness.

The Court: Well, it is something which the jury will have to decide on ultimately. That is his opinion, but the jury will have to decide on that question. It is a question that has to be given to him.

Mr. Saypol: I had thought at some stage of this pro-[fol. 1331] ceeding, perhaps more than once, there was some concession that the atomic bomb was related to the national defense.

Mr. E. H. Bloch: I do not think there is any question about that, and I did not want to get up and object to the question upon the ground that it was superfluous.

The Court: In other words, you really withdraw the objection?

Mr. E. H. Bloch: I do.

The Court: That it states a conclusion?

Mr. A. Bloch: It is such an offensive thing to me to hear an improper question, that is why I got up.

The Court: All right. Now, that you have heard it, you withdraw the objection?

Mr. A. Bloch: Certainly.

The Court: Go ahead.

Q. Does the information that has been read to you, together with the sketch concern a type of atomic bomb which was actually used by the United States of America?

A. It does. It is the bomb we dropped at Nagasaki, similar to it.

Q. Do you know whether at the time in question, 1945, any foreign government had the knowledge which our scientists possessed regarding the development and structure of that [fol. 1332] weapon, outside of the British and Canadians?

A. No, I don't know, outside of the British and Canadians.

Q. No nation possessed it?

Mr. Bloch: So far as this witness knows.

The Court: So far as you know.

Mr. Saypol: Oh, indeed.

A. Yes.

Mr. Saypol: I asked the witness a question on the basis that he was the liaison to the man directly and officially charged with the development and use of the weapon.

Q. Am I correct in that, Mr. Derry?

A. That is right, sir.

Mr. Saypol: That is all. You may cross-examine.

#### Cross-examination.

By Mr. E. H. Bloch:

Q. That exhibit that you hold in your hand or that you held in your hand—I think it has been marked Government's Exhibit 8—was there in the files of the United States Government, whether at the Los Alamos project or in Washington, D.C., a cross-section of the atomic bomb, substantially similar to the cross-section reflected in Government's Exhibit 8?

A. We had many drawings.

[fol. 1333] Q. None whatsoever?

A. We had many.

The Court: He said "many".

Mr. E. H. Bloch: Oh, I am sorry.

Q. Many. Did you have any which were substantially the same as Government's Exhibit 8?



Mr. Saypol: May I know from counsel whether he means that the Government agencies had any sketches prepared by Greenglass?

Mr. Bloch: No, anybody, anybody.

Mr. Saypol: Well, I think that must be obvious.

A. You mean in the Manhattan District or Los Alamos?

The Court: Let him answer it.

Q. Either at Los Alamos or any other place where the Manhattan District was involved.

A. My connection was at Los Alamos with respect to that.

Q. All right, then let me limit my question then: Was there any sketch or blueprint or any other documentary matter in the form of a plan or sketch or a blueprint which was substantially similar to the sketch reflected in Government's Exhibit 8?

A. At Los Alamos, yes.

Q. Pardon me?

A. At Los Alamos, yes.

Q. There was?

A. Yes.

Q. And when for the first time would you say such a sketch was on file, was made and put on file in the regular course of business at the Los Alamos project?

[fol. 1334] A. Well, it is hard to say exactly when, for this thing was in the developmental stage from the time we initiated the project until it was done. There are various and different kinds of developmental aspects of the weapon. It was constantly changing. When it was specifically put in the file, I have no way of knowing.

Q. All right. Would you say that Government's Exhibit 8 reflects a sketch of the atomic bomb when it had already been perfected?

A. Substantially.

Q. Would that refresh your recollection as to when such a sketch was made, used and filed at Los Alamos?

A. No, because, let me be clear: I was not assigned to the Los Alamos laboratory. I wasn't at the project except in a technical liaison capacity between General Groves' offices and the Los Alamos Laboratory. My dealings had nothing to do with the preparation of material and sketches,

placement of files, arrangement of material at the laboratory.

Q. I understand that, but in your important task as a liaison between General Groves and the project itself, is it not a fact that many of these sketches and many of the plans and documents in the developing stages of the atomic bomb [fol. 1335] construction and development came into your hands?

A. I saw them in the course of my business.

Q. You see, what I am trying to find out, Mr. Derry, is whether or not there ever came into your hands and whether you looked at any sketch which was substantially similar to the sketch reflected in Government's Exhibit 8.

A. Yes, I have seen them. I saw them at Los Alamos.

Q. What I am trying to do is fix the time, if you can refresh your recollection, as to when you first saw a sketch which was similar to the sketch reflected in Government's Exhibit 8.

A. Well, when I first went out there in April 1944 I was given information then about what developments were in work at that time on the weapon. Then as I kept going back, it kept constantly changing. So I would say from April 1944 through my entire association with the Los Alamos laboratory at one stage or the other I saw the work in progress; from April 1944.

Q. I understand that, but what I would like to ask you now is, does Government's Exhibit 8 reflect a cross-section of the bomb after there had been many, many months of development and experimentation?

A. The answer is yes to that.

Q. Would that refresh your recollection as to just about [fol. 1336] when a sketch similar to Government's Exhibit 8 was made and used and filed in the Los Alamos project?

A. I specifically can't say exactly when because it was in constant change, a state of flux.

Q. Well, maybe this might refresh your recollection: could such a sketch have been in the Government's files prior to January 1945?

A. Prior to January 1945? I would say yes.

Q. Just one further question, Mr. Derry: If you were asked to give a written description elucidating this sketch in Government's Exhibit 8 so that any scientist or any



person of intelligence interested might understand what you were talking about and trying to describe, could you compress a description of that within 12 pages?

A. You could give substantially the principle involved.

Q. That would not, of course, be a complete description, would it?

A. You would have the principle. That is what is intended here.

Q. Would you say from what Mr. Slavin read to you from the testimony of Mr. Greenglass where Mr. Greenglass described the various things on that sketch, including the initials, that that would represent a complete description of the cross-section of the atomic bomb and the function of the atomic bomb and how it works and the principles under [fol. 1337] which it works?

The Court: I don't think it was offered on the theory that it represented a complete—is that true, or am I mistaken?

Mr. Sappol: Indeed not. As I said when I had the witness Koski on the stand, the import of this whole thing is that there was enough supplied to act upon—

The Court: That was my understanding of the question.

Mr. Sappol: You remember, your Honor, I used the colloquialism, tip off. That is exactly—

The Court: I don't think it was offered as a complete or as a detailed description.

Mr. E. H. Bloch: That is right.

The Court: But just as the witness has testified it is a description of a principle upon which it works.

Mr. E. H. Bloch: Now what I am trying to do your Honor, is to use this question for a few follow-up questions.

The Court: I thought you said before you had one more question.

Mr. E. H. Bloch: I didn't know what the answer was going to be. I thought the answer might have been that this was a complete description, and that would have been [fol. 1338] my last question. Now that the answer is that it is not complete I have further questions.

By Mr. E. H. Bloch:

Q. This is not a complete description?

A. This substantially gives the principle involved.

Q. Would you say as a scientist, a graduate engineer who has received college courses and obtained a degree in engineering, and had the experience that you have detailed to us here, that a machinist without any degree in engineering or any scientist would be able to describe accurately the functions of the atom bomb and its component parts—

The Court: Objection sustained.

Q. Both in relation—

Mr. E. H. Bloch: May I finish it?

The Court: Yes.

Q. Both in relation to their independent functions and to their inter-related functions?

The Court: Objection sustained.

Mr. Sappol: I would like the record to show that it is the jury who will judge that from Greenglass's testimony; not this witness.

The Court: Yes, we have had a bit of summation right now.

So we will take that out of the final summation.

[fol. 1339] Mr. E. H. Bloch: It wasn't intended as a summation, your Honor. That is all.

The Court: Anything further?

Mr. E. H. Bloch: No.

(No further cross-examination.)

The Court: We will take our recess at this point. We will recess until 2.15.

Mr. Sappol: Will your Honor order this resealed on the record?

(Referring to Government's Exhibit 8 and stenographic notes.)

The Court: Yes.

(Recess to 2.15 p. m.)



[fol. 1340] Afternoon session.

COLLOQUY BETWEEN COURT AND COUNSEL

The Court: Let's see whether we can now approximate how much longer the Government's case will take, so the defense will be prepared, and they can start their case.

Mr. Cohn: I think, your Honor, that at present indication, we ought to be able to rest by lunch time tomorrow.

The Court: All right.

Mr. Cohn: The defense can probably plan to go on tomorrow afternoon.

The Court: I think the defense can probably take that as an indication.

Mr. A. Bloch: That takes me by surprise. Only this morning I understood that Mr. Saypol told you that it would probably take all day Thursday.

The Court: I know, it is true he did say that. The surprise between this morning and now wouldn't make any difference. You couldn't have done anything between this morning anyway; you were in court; but you were told when we adjourned on Friday to be prepared along the middle of the week for the defense.

Mr. A. Bloch: I did not so understand it, your Honor. I understood that the District Attorney told you that it would take him four or five days in which to complete his [fol. 1341] case. Now, today is really the first day of those four or five days.

The Court: Well, that may be.

Mr. A. Bloch: I really wanted Saturday, at least.

The Court: You had a long week end, and I am sure you didn't waste it; I am sure you did some work on your defense; am I right, Mr. Bloch?

Mr. A. Bloch: We were very busy all of the three days, your Honor, but I never anticipated being called upon to put anybody on, on behalf of the defense, this week.

The Court: Well, I am afraid you are going to have to do it if they finish their case.

Mr. E. H. Bloch: Well, may I ask the Court this favor, then: Of course, we did work all week end and we tried to gear our work to adjust it to when we might need certain things. Now, if the prosecution concludes their case by

tomorrow afternoon, may we request of your Honor that we start our defense the following morning?

The Court: No, no, we have had a lot of adjournments and I contemplate now giving the jury all of Friday off, it is Good Friday; and I believe that if they finish tomorrow—[fol. 1342] and, of course, we are merely anticipating something that may not happen—if they finish tomorrow at the luncheon recess, you are to be prepared to go right on, and I believe that you ought to be prepared to go right on no matter what time they finish, except, of course, if it is about four o'clock in the afternoon or something like that. Then we will recess until the next morning, but if their is a reasonable time left during the course of the afternoon, you should be prepared to start.

Mr. E. H. Bloch: I then suggest to your Honor that in light of our conversation at the bench about when you would want the proposed requests to charge—

The Court: It still stands for next Monday.

Mr. E. H. Bloch: Oh, it still stands for next Monday.

The Court: That is right.

Mr. E. H. Bloch: That will take some load off our shoulders.

The Court: No, I wouldn't need it before.

All right, proceed.

(Government's Exhibit 18-K marked for identification.)

Mr. Cohn: Now, your Honor, this is another document from Sobell's Selective Service file. I showed it to counsel at the luncheon recess and they have made the same con-[fol. 1343] session or stipulation, whatever you would like to call it, that the signature of the registrant here is the signature of the defendant Morton Sobell.

The Court: What is that exhibit?

Mr. Cohn: That is 18-K for identification at this time.

The Clerk: Manuel Giner de Rios.

The Court: Have you got an interpreter here?

Mr. Cohn: Yes, your Honor, I was just going to approach that point. Mr. Rios speaks a little bit of English, but not enough.

Mr. Wiesner, will you come forward, please?

(The Interpreter, Eugene Wiesner, stepped forward.)

October 3, 1952

The Editor  
The Tufts Weekly  
Tufts College  
Medford 55, Mass.

Dear Sir:

I first went to Tufts not very long after it had completed its first half-century of existence, and I have been able to observe it over most of its second half-century. My gratitude to the College and my belief in its future are expressed by the fact that I sent my daughter, Peggy, there. Tufts performs the functions of a great University, although it is content with the more modest name of college.

I still remember with deep affection the tolerance and understanding which my teachers showed me when I entered Tufts as a young boy needing all sorts of support and backing. My daughter has the same affection for the present staff of the college.

With all good wishes,

Sincerely yours,

Norbert Wiener

hb



Georges Dube has been known to me for eight years or so. He is a very able young mathematician, and I believe he is developing in a very satisfactory manner. He will be a great credit to the United States wherever he goes. Born in Maine, he is French-Canadian in origin and is equally at home in both English and French. He has already been abroad in Japan during the war in connection with his military service, and he comported himself there in a way which has greatly added to the friendship between scientists in the two countries. I hope, for the sake of international good will as well as for the progress of science, that he will receive a Fulbright grant.

As to his choice of Universities, Strasbourg is the best place for him to work with his present interests. It is also near to Nancy, where he can make other scientific contacts of great value. I am sure that he will integrate himself immediately into French academic life, and that he will be a welcome visitor.

Norbert Wiener

Professor of Mathematics

Massachusetts Institute of Technology,

Cambridge 39, Mass.

October 3, 1952

October 3, 1952

The King's Crown Hotel  
420 West 116th Street  
New York, New York

Gentlemen:

I am informed that it is necessary to send you a deposit in order to insure my reservation for a single room with bath for the night of Monday, October 6. You will find a five-dollar bill enclosed.

I shall telephone you when I arrive in New York on Monday but I do not expect to come to the hotel until late that afternoon.

Sincerely yours,

Norbert Wiener

hb



# THE INTER CONTINENTAL PRESS

*incorporating*

“EXPRESS NEWSPAPERS”

October 5th 1952

Reply to:

NY ed. ofc.

WASHINGTON, D. C., U. S. A.  
1001 National Press Building  
National 7884

NEW YORK  
Ed. Offices:  
130 East 67th St.  
Regent 7-7955

Admin. Offices:  
Suite 1504, 225 Broadway

NEW DELHI, INDIA  
"Commerce & Industry"  
Connaught Circus

BOGOTA, COLOMBIA  
"El Tiempo" Building

GENEVA, SWITZERLAND

STOCKHOLM, SWEDEN

Dr. Norbert Wiener  
Massachusetts Institute of Technology  
Cambridge, Mass.

Dear Dr. Winner:

I have read with fascination your book on Cybernetics and, like many writers, I became most interested in the facts and the implications of this new science.

Now, I have been given the very agreeable assignment of doing an article about this for the American Mercury. Prerequisite for writing anything about the subject would naturally be a talk with you.

Could you be good enough to let me know during what period you will be in Cambridge, so that we might arrange a time when I can meet you. I will be covering the opening of the United Nations General Assembly from October 14th to the 20th, and the last days of the Presidential campaign, but will be free any other time.

Looking forward to your reply, I am,  
Respectfully yours,

*Serge Fliegers*

Serge Fliegers  
Contributing Editor, The American  
Mercury

*ok*  
*ok*

*Tues<sup>OCT</sup> 21, Wed Oct. 22 Thu. Oct. 23 Fri. Oct. 24*

*copy to [unclear] [unclear] [unclear] [unclear] [unclear]*  
*for [unclear]*

FROM

G. RAMASWAMY, M.A.

'KOMALA VILAS'

73, RASHBEHARI AVENUE,

CALCUTTA-26, (INDIA).

CALCUTTA,

5-10-1952.

TO

PROF. NORBERT WIENER,

MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

CAMBRIDGE

RESPECTED SIR,

MAY I INTRODUCE MYSELF AS A RESEARCH STUDENT OF STATISTICS AND MATHEMATICS, AT PRESENT WITH THE STANDARD-VACUUM OIL COMPANY AT CALCUTTA, IN THE GEOPHYSICAL EXPLORATION DIVISION.

I AM NOW INTERESTED IN THE PROBLEM OF ELIMINATING THE RANDOM COMPONENT OF A GEO-PHYSICAL TIME SERIES; MORE PRECISELY, IN THE STUDY OF THE EFFECT OF THE RANDOM ERRORS ON THE MAGNETIC DATA, OBTAINED FROM THE RECENT AERO-MAGNETIC SURVEY OF THE BENGAL SEDIMENTARY BASIN, CONDUCTED BY THE COMPANY.

A METHOD WAS RECENTLY OUTLINED BY THOMAS A. ELKINS OF THE GULF RESEARCH & DEVELOPMENT CO., PITTSBURGH, (Pa), IN A PAPER IN 'GEOPHYSICS' (JAN, 1952). IT, HOWEVER

PTD



HAS CERTAIN SHORT COMINGS, WHICH ARE POINTED OUT IN A PAPER OF MINE, RECENTLY COMMUNICATED TO 'GEO PHYSICS', WHEREIN SUGGESTIONS ARE GIVEN TO AVOID THEM.

HOWEVER, IT SEEMS TO ME, SIR, THAT THE PROBLEM REQUIRES A MORE REFINED TREATMENT. I HAVE A FEELING THAT THE 'FILTER' METHOD AS OUTLINED IN YOUR BOOK 'INTERPOLATION, EXTRA-POLATION AND SMOOTHING OF STATIONARY TIME SERIES' MAY PROFITABLY BE TRIED ON THE PROBLEM; I HAVE NOT YET GONE INTO DETAILS

I SHALL BE VERY GRATEFUL TO YOU, IF YOU KINDLY COMMUNICATE YOUR CONSIDERED VIEWS AND SUGGESTIONS IN THIS REGARD. I AM SORRY FOR THE INCONVENIENCE CAUSED TO YOU IN THIS CONNECTION.

I HOPE YOU WILL ~~BE ABLE TO~~ WRITE AT YOUR EARLIEST CONVENIENCE.

THANKING YOU AND WITH KIND REGARDS,

I AM

VERY SINCERELY YOURS

G. Ramaswamy

[ans 10/16/52]

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

# WESTERN UNION

W. P. MARSHALL, PRESIDENT

1201

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=Int'l Letter Telegram

VLT=Int'l Victory Ltr.

The time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

.BA174

B.HKA164 NL PD=HARTFORD CONN 5=

1952 OCT 5 PM 4 14

DR NORBERT WEINER=>

MASS INST OF TECHNOLOGY CAMBRIDGE MASS=

ERROR IN MICHELSON MORLEY EXPERIMENT. LIGHT NOT LIKE SWIMMER  
BUT LIKE PROJECTILE=

MORTON SCHWARTZ=...

*329 Coventry St.  
Hartford, Conn.*



PROFESSOR M. S. SUNDARAM  
EDUCATION DEPARTMENT



EMBASSY OF INDIA  
2107 MASSACHUSETTS AVENUE, N. W.  
WASHINGTON, D. C.

Ref: F.17.14

6th October, 1952.

Dear Professor Wiener,

The Government of India and the Indian Science Congress Association have asked this Embassy to convey to you their invitation to visit India to attend the 40th Session of the Indian Science Congress, which is to be held in Lucknow in January, 1953. They would very much appreciate your acceptance of this invitation and they have further requested you to stay on in India for a period of six weeks in continuation of the science congress with a view to your visiting Indian university and research institutions. The Science Congress would like to invite you to give a few lectures at important university and scientific research centres in India. The Government of India have indicated that you would be treated as a guest of honour during your stay in the country; they are unable to meet the cost of your transportation to India and back. I hope that you will find it possible to accept the invitation and shall be glad to have your reply in due course.

Yours sincerely,

*M. S. Sundaram*  
M. S. Sundaram.

Professor Norbert Wiener, F.R.S.  
Massachusetts Institute of Technology,  
Cambridge, Mass.

MSS/bl.

[ans 10/10/52]

**Columbia University**  
**in the City of New York**

[NEW YORK 27, N. Y.]

DEPARTMENT OF ELECTRICAL ENGINEERING

October 6, 1952

Document Office, 20B-221  
Research Laboratory of Electronics ✓  
M.I.T.  
Cambridge 39, Mass.

Dear Sirs:

I would greatly appreciate it if you could send me a copy of N. Wiener's "Seminar in Nonlinear Networks," February, 1949, on a two-weeks loan basis.

Very truly yours,

*L. A. Zadeh*

L. A. Zadeh  
Assistant Professor

LAZ/me

*use information -  
to you -*



[ms 10/16/52]

*not  
RLE*

*not correct listed  
in 48 cat.*



*République Française*

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

October 7, 1952

*Ministère  
de l'Education Nationale  
NY 2696*

PLEASE REPLY TO:  
C.N.R.S. NEW YORK OFFICE  
934 FIFTH AVENUE  
NEW YORK 21, N. Y.  
REGENT 7-9700

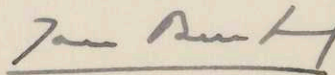
Dr. Norbert Wiener  
Dept. of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Mass.

Dear Dr. Wiener:

Professor Dupouy has asked me to send you the enclosed  
brochure on the C. N. R. S.

Thanks to your cordial reception, Professor Dupouy enjoyed  
his stay at Cambridge and found it most interesting.

Sincerely yours,



Mrs. J. Bernheim, Secretary  
C. N. R. S. New York Office

## REEVES INSTRUMENT CORPORATION

TWO FIFTEEN EAST NINETY-FIRST STREET

NEW YORK 28, N. Y.



October 8, 1952

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Professor Wiener:

It has just come to my attention that the A.S.M.E. Public Relations office has requested a second copy of your paper entitled "The Future of Automatic Machinery" which you intend to present at the A.S.M.E. annual meeting. I regret that this has happened in that you have already provided us with what we of the Management Division feel is quite sufficient, therefore, please ignore this letter.

We of the Management Division look forward with great interest to your presentation this winter, and we feel that it will be one of the highlights of the entire meeting.

Sincerely yours

A.S.M.E., MANAGEMENT DIVISION

A handwritten signature in cursive script, appearing to read 'Edward Anderson', with a long horizontal flourish underneath.

Edward Anderson

EA/cm

cc: O.B. Schier



The City College  
CONVENT AVENUE AND 139TH STREET  
NEW YORK 31, N. Y.

DEPARTMENT OF CHEMISTRY

October 8, 1952

Professor Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Mass.

Dear Professor Wiener:

Each year The City College Chemistry Alumni Association sponsors a Bicentennial Science Lecture. In the past four years our speakers have been Langmuir, Pauling, Urey and Fieser.

Our committee has unanimously decided to ask you to be our fifth bicentennial lecturer.

The honorarium connected with the lecture is \$250.

Our audience - usually from 600 to 800 - consists of scientists, undergraduate students and the lay public. The talk, of necessity, should be semi-popular and perhaps semi-philosophical.

The lecture is usually given in the Great Hall of the College and is eventually published in the Baskerville Chemical Journal (a copy of which I enclose).

In connection with this lecture we precede it with a reception in the President's office and a dinner.

Since we want to make the date of the lecture as convenient to you as possible, we have set aside three possible dates: March 26, April 9, or April 16 (1953) (all Thursdays).

*Spring vacation - Mar. 30 - Apr. 5*

The lecture - perhaps on some phase of cybernetics<sup>2</sup> - should not take up more than about fifty minutes. (Invariably after the lecture students and others will come to the platform to ask questions.)

I do hope that these plans will meet with your approval and that we will have the pleasure of entertaining you.

At your convenience, then, please send us the title of your talk (for publicity purposes).

Sincerely yours

*Benja Harrow*

Benjamin Harrow

*[ans 10/15/52] Charman*

EMANUEL H. BLOCH  
COUNSELOR AT LAW  
401 ~~270~~ BROADWAY  
NEW YORK ~~7~~, N. Y.  
PHONE WORTH 2-6851

October 9, 1952

Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge, Massachusetts

Dear Dr. Wiener:

I am the attorney for Julius Rosenberg and Ethel Rosenberg, his wife, who were sentenced to death upon their conviction for violating the espionage laws of the United States by conspiring to transmit information about the atomic bomb to the Soviet Union.

Their appeal is now pending before the Supreme Court of the United States, the highest court in our land. Its decision to review or decline to review the case will probably be announced shortly. It must be emphasized, however, that whatever the decision and ultimate judgment of this court may be, it will not be called upon to decide the guilt or innocence of the Rosenbergs because of technical or legal rules.

The innocence of the Rosenbergs, maintained stoutly by them at all times, and evidenced by their pleas of not guilty and testimony at the trial, is still an issue that has not been laid to rest. Fortunately, apart from their vindication before the bar of public opinion, our law provides further opportunities, regardless of the Supreme Court decision, to demonstrate their freedom from guilt.

My clients naturally desire to avail themselves of every process to accomplish this purpose. In consequence, I am now engaged in attempting to procure evidence, direct or circumstantial, to show that the case against them was built upon perjured testimony.

Certain evidence was introduced by the prosecution during the trial whose veracity or lack of veracity can only be determined by a scientist, as opposed to a jury of laymen. I am taking the liberty, therefore, to address this communication to you, as a renowned scientist, to elicit your expert opinion regarding this evidence.

To enable you to render an opinion, it is necessary to lay before you a summary of the relevant facts of the case pertaining to the subject of this inquiry.



The core of the charge against the Rosenbergs was that they, acting in concert with others, transmitted information concerning the atom bomb constructed at Los Alamos, New Mexico, a United States military installation, during the latter part of 1944 and continuing up to September, 1945.

The main witness for the prosecution was one David Greenglass, the brother of Ethel Rosenberg and brother-in-law of Julius Rosenberg. This witness was also a co-defendant who had pleaded guilty to the crime prior to the trial.

He testified that in 1945 he delivered to Julius Rosenberg (and Harry Gold, an accomplice) three sketches of lens molds, one of which was a schematic drawing of an experiment on implosive effects utilizing high explosive lenses plus descriptive material, used and developed at Los Alamos where he was working as a soldier-machinist. He stated he prepared these sketches immediately prior to the respective deliveries (one to Julius Rosenberg and two to Harry Gold) away from Los Alamos and not at the place or in the course of his work but solely drawing on memory.

At the trial in 1951 there were introduced into evidence, as exhibits, purported replicas of these sketches. These exhibits were made by Greenglass, according to his own testimony, after his arrest and while in jail in June, 1950 and immediately prior to his testifying at the trial in March, 1951. In other words, these replicas were prepared more than five years after the original sketches were allegedly delivered to the persons mentioned above. Furthermore, Greenglass claimed that he prepared these replicas drawing solely on his memory and without any outside aid of or assistance from any person or written technical or scientific sources.

Greenglass testified further that in September, 1945, he delivered to Rosenberg, while on a furlough in New York City, a sketch of the cross section of the Nagasaki type of atom bomb together with twelve pages of written explanatory material. Here again, he claimed he prepared this sketch and the written explanation drawing alone upon his memory and days after he had departed from Los Alamos. As with the lens mold replicas, a replica of this sketch of the Nagasaki type of atom bomb was prepared by Greenglass for trial purposes immediately prior to the time Greenglass testified at the trial, and again, was made and the explanation testified to, more than five years later solely from memory and without any help or assistance from any person or technical or scientific sources.

Greenglass made no claim that he obtained the alleged information which he transmitted from copying any blueprints. As to the cross section of the atom bomb, he never contended he even saw



any blueprints or any other sketch or written treatise on its workings. His information, he admitted, was gleaned from snatches of random conversations at the Los Alamos project and from answers he received from casual questioning of his co-workers.

It is also noteworthy to consider the technical and scientific qualifications of Greenglass. He is a high school graduate with no higher educational degree to his credit. He failed in the night courses he took in a single six month semester at a polytechnical institute. For a semester and a half he took some courses at another similar institute. He never acquired a degree in science or engineering; nor has he ever taken any courses in calculus or advanced calculus, thermodynamics, nuclear or atomic physics, or quantum mechanics. He was a machinist by vocation in civilian life for a short time prior to his induction into the army. During his army career he was assigned to work as a machinist where he advanced from the position of an ordinary machinist to that of a working foreman.

In the light of the foregoing and on the basis of these uncontroverted facts from the trial record I desire your answer to the following questions:

1. Could a person of Greenglass's background and experience have produced drawing solely from memory in 1944 and 1945 sketches of the lens molds he allegedly turned over to Rosenberg (and Gold)?
2. Could a person of Greenglass's background and experience have produced in 1950 and 1951 replicas of the sketches of the lens mold he allegedly turned over to Rosenberg (and Gold) in 1944 and 1945 drawing solely from memory and without any outside aid or assistance or coaching?
3. Could you, as a trained scientist, drawing solely from memory, produce a replica of the sketch having terminated work or other connection with such a problem?
4. Could a person of Greenglass's background and experience have produced in 1945 drawing solely from memory and without any aid or assistance from any person or technical or scientific source, a schematic drawing on an experiment on implosion effects utilizing high explosive lenses, plus appropriate descriptive material (described by Greenglass as showing "a schematic view of the lens mold set up in an



experiment")?

5. Could a person of Greenglass's background and experience have produced in 1950 or 1951 replicas of the sketches of the schematic drawing mentioned in "4", drawn solely from memory and without any outside aid or assistance or coaching?

6. Could you, as a trained scientist, drawing solely from memory, produce the replica of a sketch of such a schematic drawing, five or six years subsequent to having terminated work or other connection with a technical problem of such complexity?

7. Could a person of Greenglass's background and experience have produced in 1945 a sketch of a cross section of the Nagasaki type of atom bomb together with twelve pages of matter explaining the functions and workings of such a bomb and its component parts, drawing solely from memory and without the aid or assistance of any person or written matter or technical or scientific sources or coaching?

8. Could a person of Greenglass's background and experience have produced in 1951 a replica of the sketch of a cross-section of the Nagasaki type of atom bomb together with twelve pages of matter explaining the functions and workings of such bomb and its component parts, drawing solely from memory and without the aid or assistance of any person or written matter or help from any technical or scientific sources or coaching?

9. Could you, as a trained scientist, produce a sketch of a cross-section of this type of atom bomb together with the appropriate explanatory matter, drawing solely from memory alone five or six years subsequent to having terminated work or any connection with a technical problem of such complexity?

I am enclosing herewith photographically reproduced excerpts of the relevant portions of the trial record. In the event that you desire the entire transcript of the record I shall be glad to furnish the same to you.

Since the lives of two people are at stake and time is of the essence and in the interest of scientific truth and objectivity I trust that you will respond to this inquiry with dispatch.

Yours very truly,

*Emanuel H. Bloch*  
EMANUEL H. BLOCH

EHB/yf

[ans 10/15/52]

October 9, 1952,  
Canadian Marconi Company,  
2442 Trenton Avenue,  
Montreal 16, Quebec.

Mr. Norbert Weiner,  
Massachusetts-Institute of Technology,  
Boston, Mass.

Dear Mr. Weiner:

It has been suggested to me by my colleague, Mr. R.H. Taplin, that I write to you for some information concerning your recently developed Hearing Aid device.

Perhaps you would be so kind as to suggest some ~~re-~~  
~~ferences~~ by which I could read up the subject, or if you have written any report on your work, would you give me the name and date of the publication. I am interested privately, and also particularly interested in any development of seeing aids. It occurred to me that by the application of Television Principles, there may be a possibility of developments starting in this field.

I should be very pleased to have your comments and I thank you in anticipation.

Yours faithfully,

*W. P. Dolphin.*

W. P. DOLPHIN,  
SENIOR ENGINEER.

WPD/Mcc.

Enc 10/16/52]



GENERAL OFFICES  
WALPOLE, MASS.

— THE —  
**KENDALL COMPANY**  
BOSTON 10, MASS.

EXECUTIVE OFFICES  
140 FEDERAL STREET  
BOSTON

October 9, 1952

Dr. Norbert Wiener  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Dr. Wiener:-

As a former member of the M.I.T. Visiting Committee on Mathematics, I am taking the liberty of asking you a question.

At the recent Convocation on Science and Human Values at Mount Holyoke College one of the speakers (not Dr. Killian and not Dr. Compton) used the word "cybernetics".

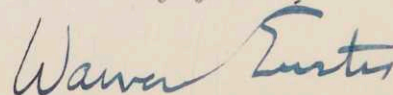
It is my recollection that you have used this word and I think you wrote a book on this subject; and I think I have seen it written with the spelling which we use herein.

In the discussion after the speech there was a great diversity of definitions for this term. Some thought it was the study of the smiliarity between animal thinking processes and mechanical thinking processes; others thought it was the science of nerve connections and correlation, etc.

As I believe you are the originator of this word, could you give me a precise definition in not more than two or three words -- is it a science, a study, or what is it? And how can the field be described most succinctly?

Please accept my personal regards.

Sincerely yours,



Warner Eustis  
Director of Research

rfm

[ans 10/16/52]

HEADQUARTERS  
SIGNAL CORPS ENGINEERING LABORATORIES  
FORT MONMOUTH, NEW JERSEY

REFER TO: SIGEL-RTB-3  
Project 112A

Director ADDRESS REPLY TO:  
Evans Signal Laboratory  
Belmar, New Jersey

OCT 9 1952

Professor N. Wiener  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Professor Wiener:

Dr. J. Hori of the Institute of Low Temperature Science, Hokkaido University, Sapporo, Japan has recently written to me requesting reprints of my work on information and physics. He has come to conclusions similar to mine and yours on the relation between thermodynamic and informational entropies, and is very much interested in your prediction theory. He is also speculating on the parallelism between time series analysis and quantum mechanics and feels intuitively that there must be a deep connection between them. I have received a paper of his on the application of semigroup theory to physics and another on information theory, the latter unfortunately in Japanese. I imagine you might be interested in communicating with him.

The writing of my full length paper on "Information, Thermodynamics and Life" is taking a great deal of time and effort. In particular, a sort of communication theory of the structure of complex molecules as applied to biochemistry necessitates extensive reading in that field. An interesting by-product of the work has been a group theoretical characterization of the concept of a physical object having permanence and identity which is almost the same as Klein's famous characterization of a geometry. The main idea is almost ridiculously simple, namely that a physical object is essentially the conceptual carrier of a set of states. Its permanence and identity reside in the fact that all operations on the object which preserve them merely transform the set of states into itself. The study of a physical object is therefore the study of the invariants of a certain transformation group.

I shall be most interested in hearing how your researches on the connection between prediction theory and quantum mechanics are coming along.

With best personal regards.

Very truly yours,

*Jerome Rothstein*

JEROME ROTHSTEIN  
Solid State Devices Section  
Thermionics Branch

[ans 10/16/52]



Директор ВИА  
Генерал-майор ВИА  
Иванов И.И.

Ленинград, 1953

Ученый секрет ВИА

Содержание работы  
I. Введение

Целью работы является исследование...  
В работе рассмотрены вопросы...  
Исследования проводились...  
Получены следующие результаты...  
Выводы: ...

В заключение следует отметить...  
Работа выполнена в соответствии с программой...  
Спасибо за внимание.

Профессор И.И. Иванов:

Институт ВИА  
Институт ВИА  
Профессор И.И. Иванов

1953

ВИА  
ВИА  
ВИА

ВИА  
ВИА-ВИА-В

ВИА  
ВИА  
ВИА

Department of Mathematics

October 9, 1952

Professor K.R. Hammond  
Department of Psychology  
University of Colorado  
Boulder, Colorado

Dear Professor Hammond:

Professor Wiener has asked me to tell you that he regrets that his supply of reprints of "Some Maxims for Biologists and Psychologists" is exhausted. Thank you for your request.

Sincerely yours,

Mrs. George Baldwin  
Secretary to Prof. Wiener

h



Department of Mathematics

October 9, 1952

Dr. Ivan D. London  
Brooklyn College  
Brooklyn, New York

Dear Dr. London:

Professor Wiener has asked me to tell you that he regrets that his supply of reprints of "Some Maxims for Biologists and Psychologists" is exhausted. Thank you for your inquiry.

Sincerely yours,

Mrs. George Baldwin  
Secretary to Prof. Wiener

h

October 10, 1952.

Y S  
L H H

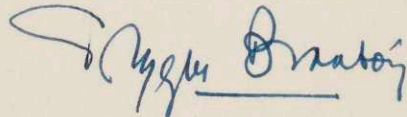
Professor Norbert Wiener,  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Mass.

Dear Professor Wiener,

Thank you very much for your letter and the paper on Behavior, Purpose and Teleology which I have read with great pleasure. § 2 p. 20 presents in an admirable and condensed form essential aspects of the problems I am concerned with.

I appreciate very much your kindness in forwarding my letter to the Josiah Macy, Jr. Foundation.

Very sincerely yours



Trygve Braatøy, M.D.  
Head of The Psychiatric Department  
Ullevaal General Hospital, Oslo  
Norway.



October 10, 1952.

~~11/11~~

1/5

Professor Norbert Wiener,  
Department of Mathematics  
Massachusetts Institute of Technology  
Cambridge 39, Mass.

Dear Professor Wiener,

Thank you very much for your letter and the paper on  
Behavior, Purpose and Teleology which I have read with  
great pleasure. § 2 p. 20 presents in an admirable and  
condensed form essential aspects of the problems I am  
concerned with.

I appreciate very much your kindness in forwarding  
my letter to the Josiah Macy, Jr. Foundation.

Very sincerely yours

Trygve Braaten, M.D.  
Head of the Psychiatric Department  
Ullevaal General Hospital, Oslo  
Norway.

Braatøy,

**OSLO KOMMUNE**

**ULLEVÅL SYKEHUS**

Norway.



TECHNOLOGY CATHOLIC CLUB  
WALKER MEMORIAL BUILDING  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS

October 10th, 1952

Dear Sir,

Experience has proven that consultation with faculty members, besides being good on scholastic matters, is also valuable from the extracurricular standpoint. Occasional advice from men in your position, on organizational procedures or similar club problems, has been beneficial for both a group as a whole and a member as an individual student, in the cases of many MIT activities. We feel that this increased benefit stems from the greater experience of faculty members and it is hoped that we may secure these qualities through your interest in increasing student-faculty relations.

The object of this letter is the formation of a staff advisory council, which need have no formal organization or schedule of meetings; but which would represent a body of interested persons available for occasional consultation. We realize, that you may be engaged in intensive work which might cause you to hesitate in an expression of possible interest. We hope that the fact that very little time would be requested of you, will enable you to voice any suggestions or comments that you have, and to permit us, as a group or as individuals, to ask your advice occasionally on matters such as those above.

Possibly, we too may be able to offer you some assistance on any questions that you have concerning the Catholic Church. Our Chaplain is available to assist in any particular queries or discussion that might exist, and our club, throughout the year, sponsors a series of lectures on topics of current and general interest. These lectures are given by both qualified laymen and religious, and are open to whoever wishes to come. Bulletin board posters and weekly postcards, announce the time, place, and topic of these presentations. Another service that we offer for the benefit of the Tech family is the celebration of Holy Mass at the Institute on holy days of obligation.

You can help us greatly, if you will return the enclosed card if it applies to you in any way. We sincerely hope, that we too can help you through the services that are now available, as well as in any other way you wish.

Thank you and God bless you,

*Luciano L. Mazzola*  
Luciano L. Mazzola, President

*Rev. J. Edward Nugent, C.S.P.*  
Rev. J. Edward Nugent, C.S.P.  
Paulist Information Center  
5 Park Street  
Boston, Massachusetts



52 Glendale Road  
Belmont, Mass.  
October 10, 1952

Dear Friend:

You may have noticed that in recent news stories the District Attorney of Middlesex County has announced a further delay of my trial and of that of the two other defendants. I have received so many inquiries about the status of my case that I want to give you a brief explanation of events as I see them.

The District Attorney has been quoted as stating that he does not wish to proceed to trial so long as one of the defendants, Mrs. Gilbert, is fighting extradition from Illinois. He has argued that trying us all together will save the County the expense of two trials. It is clear, therefore, that the responsibility for the delay rests not upon me but upon the District Attorney.

The financial argument for the delay is hardly convincing if we consider how much the taxpayers might have been saved in dollars, and how much the Commonwealth might have been saved in self-respect, if these indictments had not been sought in the first place.

It seems a refined cruelty to hold a man under criminal indictment month after month for a year and longer, his fate subject to events over which neither he nor the prosecution seem to have any control. Let me remind you that, immediately following the indictments, I said that the principal effect of my indictment was to intimidate teachers who want to speak out for peace and for the truth as they see it. The whole history of this case seems to confirm my opinion.

In short, although I am charged with shaking the foundations of the Commonwealth and of the Nation by something I supposedly said between 1944 and 1948, and the indictments came years after that, and now more than another year has elapsed, it will still be some time before the public can know whether or not a man may hold and express a point of view unpopular in some high places without going to jail.

Sincerely,

*Dirk J. Struik*

Dirk J. Struik



# COPY

October 10, 1952

Mr. Bruce B. Barrow  
Waaltdorperweg 261  
Den Haag, Nederland

Dear Mr. Barrow:

For two weeks Professor Wiener has had good intentions about answering your letter, but he hasn't had an opportunity to consider it. You can expect to hear from him in another week or two. I thought you'd like to know sooner than that that your letter to him had not gone astray.

I hope your trip is living up to your expectations in every way. With good wishes for a successful winter,

Sincerely,

Mrs. George B. Baldwin  
Secretary to Prof. Wiener

h



October 10, 1952

Dr. M.S. Sundaram  
Education Department  
Embassy of India  
2107 Massachusetts Avenue, N.W.  
Washington, D.C.

Dear Dr. Sundaram:

I have just received the invitation from the Government of India and the Indian Science Congress Association to visit India to attend the 40th Session of the Indian Science Congress. I appreciate the honor, and have every desire to see something of the great scientific developments which are taking place in India.

On the other hand, it is only a little more than a year since I returned from eight months in France where I held a Fulbright appointment at the College de France, and it is only seven months since I returned from five months in Mexico where I have been working on a Rockefeller research program with my colleague, Professor Arturo Rosenblueth, at the Instituto Nacional de Cardiologia. My travels and my responsibilities for work on these travels have left me very tired, and although I have made a partial recovery during the past summer on my farm, I shall need a summer like it next year before I feel in a position to undertake a strenuous lecturing program. The Medical Department of the Massachusetts Institute of Technology, while it considers that I could probably come to India now without disastrous consequences to my health, does not feel entirely secure in this matter, and would prefer that I postpone my trip to a latter occasion, assuming that there is a possibility of renewing the invitation.

Furthermore, I am engaged in a study of quantum theory and stochastic processes which seems to me to promise rather hopeful results. As a young man has been assigned to work with me throughout the year, I should be loath to absent myself from this work for any considerable period of time. Here, too, the Massachusetts Institute of Technology feels that a later date for my visit to India, very probably next year, would make these problems less serious.



For such a later date I should almost certainly accept an invitation to India if it were not for the very considerable expense of the travel fare to India and back. It is an expense which I do not care to pay out of my own pocket, and I feel a certain reluctance to go to one of our American Foundations after I have received so much from them in the past. If the initiative for approaching one of these Foundations should come from Indian sources, or if you could take the matter up directly with the Massachusetts Institute of Technology, I would feel considerably more at ease in the matter.

I am very much interested in India, Indians, and Indian science, and I hope some way can be found to make my trip possible in the future.

Sincerely yours,

Norbert Wiener

hb