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# MISCELLANEOUS VETERANS BILLS

CARD DIVISION

### **HEARING**

BEFORE THE

SUBCOMMITTEE ON VETERANS' AFFAIRS

# COMMITTEE ON LABOR AND PUBLIC WELFARE UNITED STATES SENATE

EIGHTY-EIGHTH CONGRESS SECOND SESSION

ON

S. 2636, H.R. 8611, H.R. 8677, and H.R. 7751 BILLS RELATING TO VARIOUS VETERANS' PROGRAMS

MAY 28, 1964

Printed for the use of the Committee on Labor and Public Welfare

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#### MISCELLANEOUS VETERANS BILLS

#### THURSDAY, MAY 28, 1964

U.S. Senate,
SUBCOMMITTEE ON VETERANS' AFFAIRS OF THE
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 4232, New Senate Office Building, Senator Ralph Yarborough (chairman) presiding.

Present: Senator Yarborough (presiding).

Committee staff members present: Charles M. Johnston, counsel; Gene Godley, associate counsel; and John D. Stringer, associate minority counsel.

Senator Yarborough. The Subcommittee on Veterans' Affairs will come to order. This morning we will hear testimony on the follow-

ing bills:

S. 2636, a bill to amend chapter 35 of title 38, United States Code, relating to educational assistance for war orphans to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program;

H.R. 8611, a bill to facilitate the performance of medical research and development within the Veterans' Administration, by providing

for the indemnification of contractors;

H.R. 8677, a bill to set aside funds for research into spinal cord in-

juries and diseases; and

H.R. 7751, a bill to extend certain construction authority to the Administrator of Veterans' Affairs in order to provide adequate veterans' hospital facilities in Los Angeles, Calif. I believe this bill is commonly referred to as the Hazard Park bill.

Without objection, I order printed a copy of each of the above bills, an explanation of each and the departmental reports on each at the point in the record where each bill is discussed by the VA representa-

tive.

This morning we are pleased to have with us as our first witness, Mr. Robert C. Fable, Jr., General Counsel of the Veterans' Administration. Mr. Fable, I believe you have with you several other representatives of the Veterans' Administration. You may come around to the witness table and bring with you those whom you desire, and introduce all of them for the benefit of the record.

Proceed in your own manner, sir.

STATEMENT OF ROBERT C. FABLE, JR., GENERAL COUNSEL, VETERANS' ADMINISTRATION; ACCOMPANIED BY DAVID A. TURNER, ASSISTANT GENERAL COUNSEL; A. T. BRONAUGH, DEPUTY ASSISTANT GENERAL COUNSEL; JOHN H. KERBY, DEPUTY ASSISTANT GENERAL COUNSEL, DEPARTMENT OF VETERANS BENEFITS; W. B. GUNDLACH, ASSOCIATE DIRECTOR FOR EDUCATION, COMPENSATION, PENSION, AND EDUCATION SERVICE; J. G. DONALD, ASSISTANT DEPUTY DIRECTOR FOR POLICY, COMPENSATION, PENSION, AND EDUCATION SERVICE, DEPARTMENT OF MEDICINE AND SURGERY; S. C. KAIM, M.D., CHIEF, RESEARCH IN PSYCHIATRY AND NEUROLOGY, RESEARCH SERVICE; ROBERT E. STEWART, D.D.S., DIRECTOR, PROSTHETIC AND SENSORY AIDS SERVICE; WHITNEY ASHBRIDGE, ASSISTANT ADMINISTRATOR FOR CONSTRUCTION; AND W. Z. BOWIE, CHIEF, REAL ESTATE DIVISION

Mr. Fable. Mr. Chairman, it is again my pleasure and privilege to appear before this committee to express the views of the Administrator on the legislation you now have under consideration. At this time, I would like to introduce the gentlemen accompanying me. They will be available in assisting in answering any questions that may arise with respect to the various questions before the subcommittee.

I have with me Mr. David A. Turner, Assistant General Counsel; Mr. Donald C. Knapp, Assistant General Counsel; Mr. A. T. Bronaugh, Deputy Assistant General Counsel; Mr. John H. Kerby, Deputy

Assistant General Counsel.

Then, sir, from the Department of Veterans' Benefits with respect to S. 2636, we have Mr. Gundlach, the Associate Director for Education, Compensation, Pension, and Education Service; Mr. J. G. Donald, Assistant Deputy Director for Policy, Compensation, Pension, and Education Service.

In connection with H.R. 8611, and H.R. 8677, I have with me Dr. Kaim, Chief of Research in Psychiatry and Neurology, Research Service, of the Department of Medicine and Surgery, and Dr. Robert E. Stewart, Director of Prosthetic and Sensory Aid Service of the Department of Medicine and Surgery.

Then, sir, in connection with the Hazard Park bill, H.R. 7751, I have with me Mr. Whitney Ashbridge, Assistant Administrator for Construction, and Mr. W. Z. Bowie, Chief of the Real Estate Division.

Senator Yarborough. I am very glad you have introduced these gentlemen. I have listed Mr. L. G. Schweickart.

Mr. Ashbridge. We did not feel he would be necessary today. Senator Yarborough. I just wanted to be sure there was no question. Thank you, gentlemen. All those whose names have been called, they are present now?

Mr. Fable. Yes, sir.

Senator Yarborough. All right.

Mr. Fable. Mr. Chairman, if I may take up now S. 2636.

(S. 2636 and related documents follow:)

88TH CONGRESS 2D SESSION

# S. 2636

#### IN THE SENATE OF THE UNITED STATES

MARCH 16 (legislative day, MARCH 9), 1964

Mr. Hill introduced the following bill; which was read twice and referred to the Committee on Labor and Public Welfare

# A BILL

To amend chapter 35 of title 38, United States Code, relating to educational assistance for war orphans to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 That (a) section 1741 (b) of title 38, United States Code,
- 4 is amended to read as follows: "The total period of educa-
- 5 tional assistance under this subchapter and other subchapters
- 6 of this chapter may not exceed the amount of entitlement as

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- 1 established in section 1711 of this title, except that the Ad-
- 2 ministrator may extend such period if he finds that additional
- 3 assistance is necessary to accomplish the purpose of special
- 4 restorative training as stated in section 1741 of this title."
- 5 (b) The amendments made by subsection (a) of this
- 6 Act shall take effect as of January 1, 1964.

#### EXPLANATION OF S. 2636

This bill amends chapter 35 of title 38, United States Code, to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program.

Currently, there is no provision which would permit the Administrator to extend the period of entitlement to special restorative training, even though a few additional months' assistance may enable the child to complete the course. This bill is designed to authorize such an extension in cases where it would

otherwise be impossible for the eligible child to complete the program.

In effect, the bill would permit the Administrator of Veterans' Affairs to increase the period of time during which a person may receive special restorative training. This training is a form of war orphans' educational assistance, and is designed to overcome or lessen the effects of a manifest physical or mental disability which would handicap an eligible person in the pursuit of a program of education.

#### AGENCY REPORTS

The Veterans' Administration and the Bureau of the Budget report favorably on this bill.

EXECUTIVE OFFICE OF THE PRESIDENT,

BUREAU OF THE BUDGET,

Washington, D.C., April 27, 1964.

Hon. LISTER HILL, Chairman, Committee on Labor and Public Welfare, U.S. Senate, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIBMAN: This will acknowledge your letter of March 17, 1964, requesting a report on S. 2636, a bill "To amend chapter 35 of title 38, United States Code, relating to educational assistance for war orphans to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program."

The Bureau of the Budget concurs in the views of the Veterans' Administration and would have no objection to enactment of S. 2636.

Sincerely yours.

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., April 29, 1964.

Hon. Lister Hill, Chairman, Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.

DEAR MB. CHAIRMAN: We are pleased to respond to your request for a report by the Veterans' Administration on S. 2636, 88th Congress, a bill to amend chapter 35 of title 38, United States Code, relating to educational assistance for war orphans to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program.

The basic purpose of S. 2636 is indicated by its title quoted above. In effect, it would permit the Administrator of Veterans' Affairs to increase the period of time during which a person may receive special restorative training. This training is a form of war orphans' educational assistance, and is designed to overcome or lessen the effects of a manifest physical or mental disability which would handicap an eligible person in the pursuit of a program of education. The nature of such training is indicated by the following excerpt from the report of the House Committee on Veterans' Affairs to accompany H.R. 9824, 84th

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Congress, the bill which became the War Orphans' Education Assistance Act of 1956 (H. Rept. No. 1974, 84th Cong.):

"Since some eligible persons are certain to be suffering from physical or mental disabilities which handicap them in the pursuit of their education, this act contains provision for suitable training of such persons, called special restorative training. Special restorative training is intended to provide training or retraining to restore or improve the individual's ability with respect to physical or mental functions in which he is handicapped and which are essential to the normal pursuit of education. It would include courses of training such as language retraining, speech and voice correction, speech retention or voice retention, speech (lip) reading, auditory training, braille reading and writing, training in ambulation, one-hand typewriting, left-hand or non-dominant-hand writing, personal adjustment training, and so forth. Special restorative training means a plan of training activities and does not mean medical care and treatment."

The basic period of entitlement to special restorative training, and the monthly monetary allowance payable, are both identical to those applicable to war orphans' educational assistance generally, namely, 36 months' entitlement and \$110 monthly monetary allowance, respectively. However, if the tuition fees applicable to any course are more than \$35 per calendar month the basic allowance may be increased by the amount that such charges exceed \$35 per month, but the child's period of entitlement must be reduced by 1 day for each \$3.60 that the special training allowance paid exceeds the basic monthly allowance.

There is no provision currently in the law which would permit the Administrator to extend the period of entitlement to special restorative training, even though a few additional months' assistance may enable the child to complete the course. This bill is designed to authorized such an extension in cases where it would otherwise be impossible for the eligible child to complete the program, an authority similar to that provided by 38 U.S.C. 2502(b) with respect to the vocational rehabilitation program for service-disabled veterans. (Under that law the basic period of eligibility is set at 4 years but may be extended by the Administrator where a longer period is needed to effectuate rehabilitation.)

In our opinion the enactment of S. 2636 would be desirable. It would provide financial aid to assist a handicapped orphan to complete the specialized restorative training necessary to continue his program of education and to assume a productive role in society. Moreover, it would eliminate the possibility which now exists that the training and monetary support furnished would be wasted because of the inability of the war orphan to complete the necessary training.

We noted that, under the subject bill, no limitations are placed on the number of months of entitlement except for the age limit now in the law. However, we do not foresee that abuses will occur in providing the additional educational assistance to those orphans for whom it is required. The Vocational Rehabilitation Board, set up in each regional office having vocational rehabilitation and education activities, determines need for special restorative training for orphans. Thus, the decision becomes that of a group of professionally qualified persons and the possibility of abuse is minimized.

Without more specific information on the probable numbers of additional persons who might avail themselves of the proposed benefit, and of the numbers who might want an extension of time and/or who might justify an increased rate of allowance while enrolled, we are unable to make a firm estimate of probable cost. However, based upon the information available, we believe it reasonable to assume that the cost under this proposal probably would not be more than twice the annual rate of cost for persons who would be enrolled for special restorative training under existing provisions of the program. Under this assumption, we would expect that the additional cost probably would not exceed \$25,000 a year for an average monthly enrollment of approximately 20 persons.

In view of the foregoing, I recommend favorable consideration of S. 2636 by your committee.

We are advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the presentation of this report to your committee.

Sincerely,

J. S. GLEASON, Jr., Administrator.

Mr. Fable. S. 2636 amends those provisions of the war orphans' educational assistance program (38 U.S.C., ch. 35) which relate to special restorative training. It would authorize the Administrator

to extend the period of time during which a handicapped child may receive such training whenever he finds that the child needs additional training to overcome, or lessen, the effects of a physical or mental disability that is handicapping the child in the pursuit of a normal

educational program.

By way of background, let me point out that special restorative training would include courses of training such as language retraining, speech and voice correction, speech retention or voice retention, speech (lip) reading, auditory training, braille reading and writing, training in ambulation, one-hand typewriting, left-hand or non-dominant-hand writing, personal adjustment training, and so forth. It would not include medical care and treatment.

The basic period of entitlement to special restorative training, and the monthly monetary allowance payable, are both identical to those applicable to war orphans' educational assistance generally; namely, 36 months' entitlement and \$110 monthly monetary allowance, respectively. However, if the tuition fees applicable to any course are more than \$35 per calendar month, the basic allowance may be increased by the amount that such charges exceed \$35 per month, but the child's period of entitlement must be reduced by 1 day for each \$3.60 that the special training allowance paid exceeds the basic monthly allowance.

There is no provision currently in the law which would permit the Administrator to extend the period of entitlement to special restorative training, even though a few additional months' assistance may enable the child to complete the course. S. 2636 is designed to authorize such an extension in cases where it would otherwise be impossible for the eligible child to complete the program, an authority similar to that provided by 38 U.S.C. 1502(b) with respect to the vocational rehabilitation program for service-disabled veterans. (Under that law the basic period of eligibility is set at 4 years but may be extended by the Administrator where a longer period is needed to effectuate rehabilitation.)

In our opinion the enactment of S. 2636 would be desirable. It would provide financial aid to assist a handicapped orphan to complete the specialized restorative training necessary to continue his program of education and to assume a productive role in society. Moreover, it would eliminate the possibility which now exists that the training and monetary support furnished would be wasted because of the inability of the war orphan to complete the necessary training.

Based upon the best information available, we estimate that the additional cost to the Government as the result of the enactment of this bill would probably not exceed \$25,000 per year for an average monthly

enrollment of approximately 20 persons.

Senator Yarborough. Thank you, Mr. Fable, for a very good explanation in a very short period of time.

Does counsel have any questions of the witness?

Mr. Johnston. No.

Senator Yarborough. Does counsel for the minority?

Mr. Stringer. No.

Senator Yarborough. One question. Do you know if anybody who can type with one hand can become very proficient? How many words per minute?

Mr. FABLE. Mr. Gundlach may be able to answer that.

Mr. Gundlach. As to the speed that is attained? I am sorry; I do not have the record of that.

Mr. Fable. We will submit that for the record; sir. Mr. Gundlach. We do have some who are employed.

Senator Yarborough. I do not think it affects the merits of the bill. It is just a matter of curiosity about what you are able to do in that regard.

Mr. Gundlach. We can supply it. Senator Yarborough. Thank you. (The information requested follows:)

It can be expected that one-hand typists can attain a proficiency of approximately 60 percent of those utilizing two hands.

Mr. Fable. Mr. Chairman, we now come to H.R. 8611.

(H.R. 8611 and related documents follow:)

### 88TH CONGRESS 1ST SESSION

# H. R. 8611

### IN THE SENATE OF THE UNITED STATES

OCTOBER 8 (legislative day, OCTOBER 3), 1963
Read twice and referred to the Committee on Labor and Public Welfare

# AN ACT

To facilitate the performance of medical research and development within the Veterans' Administration, by providing for the indemnification of contractors.

- Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 That (a) section 216 of title 38, United States Code, is
- amended by inserting "(1)" immediately after "(a)", and
- 5 changing "(b)" and "(c)" to "(2)" and "(3)", re-
- 6 spectively.
- 7 (b) Such section 216 is further amended by adding at
- g the end thereof a new subsection (b), as follows:
- 9 "(b) With the approval of the Administrator, any
- 10 contract for research authorized by this section or for medical

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- 1 research or development authorized by section 4101 of this
- 2 title, may provide for the indemnification of contractors to
- 3 the extent and subject to the limitations provided in section
- 4 2354, title 10, United States Code, except that approval
- 5 and certification required thereby shall be by the Adminis-
- 6 trator."
- 7 (c) Such section 216 is further amended by adding
- 8 the following at the end of the catchline: "; indemnification
- 9 of contractors".
- 10 (d) The analysis of chapter 3 of such title 38 regarding
- 11 section 216 is amended by inserting before the period at the
- 12 end thereof "; indemnification of contractors".

Passed the House of Representatives October 7, 1963.

Attest:

RALPH R. ROBERTS,

Clerk.

#### EXPLANATION OF H.R. 8611

The purpose of this bill is to facilitate the performance of medical research and development within the Veterans' Administration, by providing for the indemnification of contractors.

This bill would authorize the Veterans' Administration to include within its research and development contracts a provision providing for the indemnification of contractors against liability and loss resulting from death, or injury to persons or property arising out of the direct performance of such contract.

Currently there is some difficulty arising from a refusal or reluctance of contractors or suppliers to undertake or become involved in a research or development contract without securing some guarantee of indemnification in the event of liability resulting from these projects. As a result, some developmental work is stymied before the work is completed.

#### AGENCY REPORTS

The Veterans' Administration and the Bureau of the Budget reported favorably on this bill.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS AFFAIRS,
Washington, D.C., May 26, 1964.

Hon. LISTER HILL, Chairman, Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: On October 24, 1963, in response to your request, I expressed to your committee the views of the Veterans' Administration on H.R. 8611, 88th Congress, an act to facilitate the performance of medical research and development within the Veterans' Administration, by providing for the indemnification of contractors. I advised that H.R. 8611 was identical to the draft of a bill we transmitted to the President of the Senate on September 26, 1963, with the request that it be introduced in order that it might be considered for enactment.

H.R. 8611 would authorize the Veterans' Administration to include within its research and development contracts a provision providing for the indemnification of contractors against liability and loss resulting from death, or injury to persons or property arising out of the direct performance of such contract. Such a provision would alleviate difficulties we have encountered, on certain medical research projects, in obtaining necessary materials and supplies. This difficulty has arisen from a refusal, or reluctance, of contractors or suppliers, to undertake or become involved in a research or development contract without securing some guarantee of indemnification in the event of liability resulting from these projects.

The authority which would be afforded by this legislation would be invaluable in those few situations where we otherwise would be unable to continue with the development, looking toward clinical use, of a new drug or other substance resulting from our research program. For example, we were stymied for many months in attempting to complete the developmental work on a plasma expander which holds great promise of drastically reducing the amount of whole blood required for open heart surgery. I need not expound the importance of this to both the care of veterans and to the country.

Representatives of private insurance companies have advised us, however, that notwithstanding the fact that they recognize there will be some circumstances when the Veterans' Administration will have definite need for the authority which would be conferred by H.R. 8611, they are concerned that the bill, as drafted, might be a precedent for governmental competition with private insurance. Since the bill would merely extend to the Veterans' Administration the authority which the Department of Defense has had for a number of years, we did not view this proposal as precedental, nor did we anticipate using the indemnification authority when private insurance was available to contractors at a reasonable cost. However, since concern has been expressed, we have prepared and are enclosing an amendment to the bill, in the form of a complete redraft, which we believe would be not only satisfactory to the Government but would be acceptable to the insurance industry.

In drafting the aforestated proposed amendment, we have followed, to a great extent, a provision contained in an 87th Congress bill (sec. 308 of H.R. 8095), involving the National Aeronautics and Space Administration, which was favorably reported by the House Committee on Science and Astronautics. Like H.R. 8611, such bill would authorize the United States to indemnify a contractor against certain risks of an unusually hazardous nature. It also provides that a party to an indemnification agreement shall maintain financial protection at least equal to the amount of private insurance available. However, discretionary authority is included whereby the Administrator may authorize a lesser amount whenever costs or terms of private insurance would make its purchase prohibitive.

The only significant variation between the 87th Congress bill and the enclosed draft concerns the provision which would authorize the use of facilities and services of private insurance organizations in administering the indemnification provision. The legislative history of a similar provision contained in the Atomic Energy Commission indemnification authority (42 U.S.C. 2210(g)), indicates that it concerns investigative and claims adjustment services. Since we are currently organized and staffed to handle these services under normal conditions. the proposed authority has been made permissive in nature, rather than mandatory, and no doubt would only be utilized under the most extraordinary circumstances.

In addition to the provisions discussed above, the proposed amendment would set forth the specifics, such as extent of coverage, limitations, etc., in title 38 rather than referring to the Department of Defense provisions in title 10 of the United States Code, for such information.

We do not anticipate that this amendment to H.R. 8611 would result in any additional cost to the Government, and we are hopeful that it will receive early and favorable consideration by your committee.

We are advised by the Bureau of the Budget that there is no objection from the standpoint of the administration's program to the presentation of this amendment to your committee.

Sincerely.

J. S. GLEASON, Jr., Administrator.

Enclosure.

#### AMENDMENT TO H.R. 8611, 88TH CONGRESS

Strike the language commencing on line 9 of page 1 through line 6 of page 2 and insert in lieu thereof the following:

"(b) (1) With the approval of the Administrator, any contract for research authorized by this section or for medical research or development authorized by section 4101 of this title, the performance of which involves a risk of an unusually hazardous nature, may provide that the United States will indemnify the contractor against either or both of the following, but only to the extent that they arise out of the direct performance of the contract and to the extent not covered by the financial protection required under subsection (b) (5):

"A. Liability (including reasonable expenses of litigation or settlement) to third persons, except liability under State or Federal Workmen's Compensation Acts to employees of the contractor employed at the site of and in connection with the contract for which indemnification is granted, for death, bodily injury, or loss of or damage to property, from a risk that the contract defines as unusually hazardous.

"B. Loss of or damage to property of the contractor from a risk that the contract defines as unusually hazardous.

"(2) A contract that provides for indemnification in accordance with subsection (b) (1) must also provide for-

"A. notice to the United States of any claim or suit against the contractor for death, bodily injury, or loss of or damage to property; and

"B. control of or assistance in the defense by the United States, at its election, of any such suit or claim for which indemnification is provided hereunder.

"(3) No payment may be made under subsection (b)(1) unless the Administrator, or his designee, certifies that the amount is just and reasonable.

"(4) Upon approval by the Administrator, payments under subsection (b) (1) may be made from-

"A. funds obligated for the performance of the contract concerned:

"B. funds available for research or development, or both, and not otherwise obligated: or

"C. funds appropriated for those payments.



"(5) Each contractor which is a party to an indemnification agreement under subsection (b) (1) shall have and maintain financial protection of such type and in such amounts as the Administrator shall require to cover liability to third persons and loss of or damage to the contractor's property. The amount of financial protection required shall be the maximum amount of insurance available from private sources, except that the Administrator may establish a lesser amount, taking into consideration the cost and terms of private insurance. Such financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures.

"(6) In administering the provisions of this section, the Administrator may use the facilities and services of private insurance organizations, and he may contract to pay a reasonable compensation therefor. Any contract made under the provisions of this subsection may be made without regard to the provisions of section 5 of title 41, upon a showing by the Administrator that advertising is not reasonably practicable, and advance payments may be made.

"(7) The authority to indemnify contractors under this section does not create

any rights in third persons which would not otherwise exist by law.

"(8) As used in this section, the term 'contractor' includes subcontractors of any tier under a contract in which an indemnification provision pursuant to subsection (b) (1) is contained."

Mr. Fable. That bill is designed to facilitate the performance of medical research and development within the Veterans' Administration by providing for the indemnification of contractors against liability and loss resulting from death, or injury to persons or property, arising out of the direct performance of a research and development contract. At present we lack authority to include such a provision in our research and developmental contracts.

The Veterans' Administration has encountered difficulties, on certain medical research projects, in obtaining necessary materials and supplies due to a refusal or reluctance of contractors or suppliers, to undertake, or become involved in a research or development contract, involving new projects or developments, without securing some guarantee of indemnification in the event of liability resulting from claims made as a result of damage from these experiments. For example, our medical research people were stymied for many months in attempting to complete the developmental work on a plasma expander which holds great promise of drastically reducing the amount of whole blood required for open heart surgery. I need not expound the importance of this to both the care of veterans and to the country.

As introduced, the bill would make applicable to our programs the authority granted the Department of Defense in section 2354 of title 10, United States Code. This same authority has been made applicable to the National Institutes of Health by virtue of this type of provision which has been included in recent years in the annual Public Health

Services Appropriation Act.

While the bill, as introduced and as passed by the House, would meet our needs, we have been informed by representatives of private insurance companies that they were concerned that the bill might be considered a precedent for governmental competition with private insurance. We had not so viewed the bill, nor did we anticipate using the indemnification authority when private insurance was available to our contractors at reasonable cost. However, since concern had been expressed, we prepared, and in a supplemental report of May 26, 1964, to the chairman of the full committee the Administrator recommended an amendment to the bill in the form of a complete redraft which



would not only be satisfactory to the Government but we believe would

be acceptable to the insurance industry.

As would be the case with the bill as introduced, the amendment would authorize the United States to indemnify a contractor against certain risks of an unusually hazardous nature. It also provides that a party to an indemnification agreement shall maintain financial protection at least equal to the amount of private insurance available. However, discretionary authority is included whereby the Administrator may authorize a lesser amount whenever costs or terms of private insurance would make its purchase prohibitive.

In addition, the proposed amendment would set forth the specifics, such as extent of coverage, limitations, and so forth, in title 38 rather than referring to the Department of Defense provisions in title 10 of

the United States Code, for such information.

We do not anticipate that the enactment of H.R. 8611, either in its original form, or in the form as now recommended, will result in any additional cost to the Government, and hope that it will receive favor-

able consideration by the committee.

Senator Yarborough. Now, what is the situation, Mr. Fable, with reference to other Government research in other departments? Does the Government in other types of research have such responsibility in the law to provide for the indemnification of contractors? Is this a new departure for the Government, or does this follow the practice of the Government in the vast amount of research carried on by the Government?

Mr. Fable. Mr. Chairman, this would bring the Veterans' Administration in line with other areas of the Federal Government where this authority already exists. It exists in the Defense Department and in the National Institutes of Health.

This would give us the same kind of basic authority to deal with

our contractors that those agencies already possess.

Senator Yarborough. In the research department of the NIH, do they have the same kind of authority mentioned in the letter addressed to Senator Hill of May 26 to provide for insurance? Is that in relation to other parts of the Government?

Mr. Fable. May I ask Mr. Bronaugh on that? This is Mr. Bronaugh, Deputy Assistant General Counsel, who has made much

research in this area.

Mr. Bronaugh. The basic law applies to the Defense Department which does not have a specific provision relating to private insurance in its law. Such a provision appears in the AEC, and was also contained in a bill to codify certain authorities of the NASA. However, I do not believe that bill has as yet become law.

Senator Yarborough. What about NIH? Does the National Insti-

tutes of Health have this provision in it?

Mr. Bronaugh. The NIH provision is almost identical with H.R. 8611 as introduced. In other words, it makes applicable to NIH the authorities in title 10 of the United States Code which originally were enacted for the Defense Department.

Senator Yarborough. Does the House bill as passed have this pro-

vision?

Mr. Bronaugh. The House bill as passed merely makes applicable to the VA programs the authority now given to the Defense Depart-

ment. The amendment we now propose follows the Defense Department authority with the exception of the provision we are discussing now. It also contains discretionary authority similar to that in the Atomic Energy Committee law to permit the use of private insurance organizations as claims agents if they should be needed. As we pointed out in our report to Senator Hill, while we think this discretionary authority would actually not be used, we would have the authority to exercise it.

Senator Yarborough. Is that pointed out in the letter of May 26 to

Senator Hill?

Mr. Bronaugh. Yes, Senator.

Senator Yarborough. Any questions by counsel?

Mr. Johnston. No.

Senator Yarborough. Any questions by minority counsel?

Mr. Stringer. No.

Senator Yarborough. I was studying this report of May 26, Mr. Fable. I personally would favor the House bill as passed and would not favor the inclusion of this amendment unless this has already become a settled governmental practice in other fields of Government research, because I would not favor adding any amendment that might in any way increase the cost of Government research or slow it down any. I believe at this time, out of all of the moneys spent for research in this country of all types, the Federal Government spends over half of all the money spent for research. I am not sure whether you have that information or not.

Mr. Fable. I am afraid I do not, sir, but perhaps we could look

into it.

Senator Yarborough. For all research in private and governmental fields, taken across the board—Defense, National Institutes of Health, Agriculture—all types of research—the Federal Government is spending over half of the money spent.

Does anyone here happen to know the statistical breakdown of the

money spent in research by the Government?

Mr. Bronaugh. Our appropriations for fiscal year 1965, as passed by the House, would be \$36 million.

I do not know how much—I understand NIH is much larger.

Senator Yarborough. Oh, yes. It runs into the billions, of course, in all branches of the Government, for research.

Well, we shall consider that amendment when the subcommittee meets in executive session.

Mr. FABLE. Thank you.

Mr. Stringer. I was wondering about the names of the companies that have not cooperated. Have they refused to cooperate on these projects because of lack of indemnification? Is that very common?

Dr. Kaim. In the case of the plasma expander, the Pfizer Co. has a process of fermentation which is necessary to produce the plasma expander which we are trying to develop. It would be extremely expensive for the Veterans' Administration to try to duplicate this process. The Pfizer Co. was quite willing to help produce this material with their process at no cost to the Veterans' Administration, but were fearful of the lack of indemnification in case of damages resulting from the plasma expander. This is what really prompted our concern with our lack of legislation to deal with this problem.

Senator Yarborough. Any further questions? Mr. Stringer. No.

Senator Yarborough. At this point in the record, I order printed the statement by Mr. David M. Marsh, manager, Washington office, of the Association of Casualty and Surety Companies, on behalf of that association and the American Mutual Insurance Alliance, in connection with H.R. 8611.

STATEMENT ON BEHALF OF THE ASSOCIATION OF CASUALTY AND SURETY COMPANIES AND THE AMERICAN MUTUAL INSURANCE ALLIANCE IN CONNECTION WITH H.R. 8611 BY DAVID M. MARSH, MANAGER, WASHINGTON OFFICE, ASSOCIATION OF CASUALTY AND SURETY COMPANIES

Mr. Chairman and members of the subcommittee, we appreciate the opportunity afforded to us to submit a statement in connection with the captioned legislation. We are especially interested in the amendments submitted by the Veterans' Administration with their letter to Hon. Lister Hill, dated May 26, 1964. In essence, these amendments provide that the indemnity afforded shall only attach above the financial protection required by the Administrator of the Veterans' Administration and that the amount of financial protection required shall be the maximum amount of insurance available from private sources except that the Administrator may establish a lesser amount taking into consideration the costs and terms of private insurance. Such financial protection may include private insurance, private contractual indemnity, self-insurance, other proof of financial responsibility, or a combination of such measures.

Insurers have always taken the position that they have no objection to the extension of indemnity to Government contractors in cases where private insurance is not available. The amendments would permit just such a course of action. It is to be noted that this approach is consistent with the policy of other Government agencies such as the DOD and NASA in considering insurance premiums paid by its contractors to be an allowable item of cost. It is significant that no objection to the proposed amendment was raised by the Bureau of the Budget.

Aside from the observance of the traditional Government policy of not substituting Government indemnity for private insurance, the use of underlying insurance coverage here will have the effect of encouraging contractors to undertake hazardous experiments. For some time contractors have been unhappy with the type of indemnity proposed by this amendment. You will notice that subdivision (b) (4) provides:

- (4) Upon approval by the Administrator, payments under subsection (b)(1) may be made from—
  - A. Funds obligated for the performance of the contract concerned;
- B. Funds available for research or development, or both, and not otherwise obligated; or
  - C. Funds appropriated for those payments.

These restrictions have caused concern among contractors that there might not be funds available for indemnity upon the happening of an incident. The use of underlying insurance therefore cannot help but encourage contractors to undertake hazardous research since they will

be confident upon the happening of a serious incident they will have available to them the claims facilities of insurers and the assurance

that money will be available to meet claims which may arise.

We are also persuaded that the use of underlying insurance will not involve any additional cost to the Government in the long run. The expeditious handling of claims and the availability of other insurance services cannot help but be of immense benefit to the research program being conducted by the Veterans' Administration. Furthermore, the language of the proposed amendment that the Administrator may take into account the cost and terms of private insurance allows the Veterans' Administration to make certain that premiums charged by insurers will be commensurate with risks involved. In this regard, it should be noted that the Veterans' Administration's letter states that the Administration does not anticipate that the amendment to H.R. 8611 will result in any additional cost to the Government.

Needless to say, aside from all reasons advanced heretofore, the insurance industry would consider the establishment of first dollar indemnity in this area as an intrusion into an area now occupied by private enterprise. Certainly, there appear to be no compelling reasons why these amendments cannot be adopted especially since they are

supported by all those interested in the measure.

In addition, Chairman Teague of the House Veterans' Affairs Committee has indicated that he is amenable to incorporating the amendments proposed by the Veterans' Administration into the House version of the bill.

For these reasons we sincerely urge that you give favorable consideration to the amendments of H.R. 8611 as proposed by the Veterans'

Administration in their letter of May 26, 1964.

Senator Yarborough. I have also received a letter from the Chamber of Commerce of the United States, signed by Mr. Theron J. Rice, legislative action general manager, dated June 12, 1964. I order that letter printed at this point in the record.

(The letter follows:)

CHAMBER OF COMMERCE OF THE UNITED STATES, Washington, D.C., June 12, 1964.

Hon. RALPH W. YARBOBOUGH, Chairman, Subcommittee on Veterans' Affairs, Senate Labor and Public Welfare Committee, U.S. Senate, Washington, D.C.

DEAR SENATOR YARBOROUGH: The Chamber of Commerce of the United States supports the amendments to H.R. 8611 submitted by the Veterans' Administration in its letter of May 26, 1964, to the chairman of the Senate Committee on Labor and Public Welfare.

The purpose of H.R. 8611, as stated by the Veterans' Administration, is to provide authority to indemnify contractors and suppliers in those instances involving contracts for work of an unusually hazardous nature, such as research using dangerous or little understood drugs and for which the contractor may have difficulty in obtaining insurance coverage.

The bill in its present form goes beyond the stated purpose by authorizing the Government to provide indemnity in cases in which private insurers are

ready to provide coverage.

In effect, the proposed amendments would bring H.R. 8611 into conformance with the Veterans' Administration's stated purpose by limiting the use of Government indemnity to that liability coverage not available to contractors through private insurance or other means, such as private contractual indemnity. The Veterans' Administration in its letter to Senator Hill indicates that the

cost to the Government would not increase should the proposed amendments be incorporated into H.R. 8611. The Bureau of the Budget has said that there is no objection to the amendments from the standpoint of the administration program.

We urge favorable action on the amendments. Sincerely yours,

THERON J. RICE.

Senator Yarborough. Go ahead, Mr. Fable. Mr. Fable. I now come, Mr. Chairman, to H.R. 8677. (H.R. 8677 and related documents follow:)

88TH CONGRESS 1ST SESSION

# H. R. 8677

#### IN THE SENATE OF THE UNITED STATES

OCTOBER 22, 1963

Read twice and referred to the Committee on Labor and Public Welfare

### AN ACT

To amend title 38, United States Code, to set aside funds for research into spinal cord injuries and diseases.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 That section 216(c) of title 38, United States Code, is
- 4 amended by adding at the end thereof the following: "For
- 5 each fiscal year in the period beginning July 1, 1964, and
- 6 ending June 30, 1970, the Λdministrator shall set aside not
- 7 less than \$100,000 of such appropriated funds for the con-
- 8 duct of research into spinal cord injuries and diseases, and
- 9 other disabilities that lead to paralysis of the lower
- 10 extremities."

Passed the House of Representatives October 21, 1963.

Attest:

RALPH R. ROBERTS,

Clerk.

#### EXPLANATION OF H.R. 8677

This bill amends title 38, United States Code, to set aside funds for research into spinal cord injuries and diseases.

Currently, the Administrator is directed to conduct research in the field of prosthesis, prosthetic appliances and similar devices, and the United States Code authorizes annual appropriations to remain available until expended for this purpose. This bill would require that not less that \$100,000 of such funds be set aside for research into spinal cord injuries and diseases.

#### AGENCY REPORTS

The Veterans's Administration and the Bureau of the Budget report unfavorably on this bill. They advise that for research purposes the nervous system should not be considered in piecemeal fashion and exclusively in relation to specific disabilities.

EXECUTIVE OFFICE OF THE PRESIDENT,

BUREAU OF THE BUDGET, .

Washington, D.C., March 16, 1964.

Hon. LISTER HILL,

Chairman, Committee on Labor and Public Welfare, U.S. Scnate, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: This will acknowledge your letter of December 13, 1963, requesting the views of the Bureau of the Budget regarding H.R. 8677, to amend title 38, United States Code, to set aside funds for research into spinal cord injuries and diseases.

The purpose of H.R. 8677 is to require the Administrator of Veterans' Affairs to set aside not less than \$100,000 of the funds appropriated by Congress for research in the field of prosthesis, prosthetic appliances, and similar devices and to spend such funds for research into spinal cord injuries and diseases, and other disabilities that lead to paralysis of the lower extremities. The bill's requirement would be applicable to the fiscal year 1965 and each fiscal year thereafter ending with the fiscal year 1970.

The Administrator of Veterans' Affairs is recommending against the enactment of H.R. 8677 in the report which he is making to your committee for the reasons stated therein. The Bureau of the Budget joins the Administrator in recommending that H.R. 8677 not be enacted.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., March 17, 1964.

Hon. LISTER HILL, Chairman, Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.

DEAB MR. CHAIRMAN: We are pleased to furnish the following comments in response to your request for a report by the Veterans' Administration on H.R. 8677, 88th Congress, which was passed by the House of Representatives on October 21, 1963.

Section 216(c) of title 38, United States Code, specifically directs the Administrator to conduct research in the field of prosthesis, prosthetic appliances, and similar devices. It authorizes annual appropriations to remain available until expended, as necessary for this purpose. This bill would add to section 216 a provision that would require the Administrator to set aside for each fiscal year in the period beginning July 1, 1964, and ending June 30, 1970, not less than \$100,000 of such appropriated funds for the conduct of research into spinal cord injuries and diseases, and other disabilities that lead to paralysis of the lower extremities.

Expenditures in spinal cord research for the fiscal year 1963 are estimated to have been over \$300,000 if there are included all the expenditures for research directly or indirectly related to spinal cord injury and disease. In view of this

experience and the obvious importance of research in this field, it is apparent that there will continue to be an ample measure of research in the field to which this bill relates. As a practical matter, therefore, this legislation is not necessary to assure that its purposes will be achieved. In addition, it is our view that enactment of this bill would set an unwise precedent for earmarking research funds for various neurological disabilities and diseases, of which there are many.

The difficulty we have with this type of legislation is the fact that it is based upon what we believe to be the fallacious premise that funds should be earmarked to facilitate one aspect of research in the much larger area of the nervous system. For research purposes the nervous system should not be considered in piecemeal fashion and exclusively in relation to specific disabilities. As an example, multiple sclerosis, although a disease seriously affecting the spinal cord, also affects all other parts of the nervous system. To fragmentize our research efforts might retard total research in the field of the many disabilities related to paralysis of the lower extremities. We would much prefer that no limitation of the specific nature proposed by the bill be placed on the use of funds.

We note that this amendment calling for the earmarking of funds is in the context of the section of title 38 which deals with prosthetic research, whereas, here we are dealing with spinal cord injuries and diseases and other disabilities leading to paralysis of the lower extremities. While these conditions frequently result in the use of prosthetic devices, the research into the causes, supported by the general appropriation for medical research, is quite different from research designed to perfect suitable appliances for the resulting disabilities. It is clearly inappropriate to make the requirement for setting aside funds for the specified area of medical research applicable to appropriations for another purpose.

For the reasons stated, I do not recommend favorable consideration of the

bill by your committee.

We are advised by the Bureau of the Budget that there is no objection to the presentation of this report from the standpoint of the administration's program. Sincerely.

#### J. S. GLEASON, Jr., Administrator.

Mr. Fable. This bill would amend section 216(c) of title 38, United States Code, to provide that for each fiscal year in the period beginning July 1, 1964, and ending June 30, 1970, the Administrator shall set aside not less than \$100,000 of funds appropriated for prosthetic research for the conduct of research into spinal cord injuries and diseases, and other disabilities that lead to paralysis of the lower extremities.

Expenditures in spinal cord research for the fiscal year 1963 are estimated to have been over \$300,000 if there are included all the expenditures for research directly or indirectly related to spinal cord injury and disease. In view of this experience and the obvious importance of research in this field, it is apparent that there will continue to be an ample measure of research in the field to which this bill relates. As a practical matter, therefore, this legislation is not necessary to assure that its purposes will be achieved. In addition, it is our view that enactment of this bill would set an unwise precedent for earmarking research funds for various neurological disabilities and diseases, of which there are many.

The difficulty we have with this type of legislation is the fact that it is based upon what we believe to be the fallacious premise that funds should be earmarked to facilitate one aspect of research in the much larger area of the nervous system. For research purposes the nervous system should not be considered in piecemeal fashion and exclusively in relation to specific disabilities. As an example, multiple sclerosis, although a disease seriously affecting the spinal cord, also affects all other parts of the nervous system. To fragmentize our research efforts might retard total research in the field of the many disabilities related to paralysis of the lower extremities. We



would much prefer that no limitation of the specific nature proposed

by the bill be placed on the use of funds.

We particularly note that this amendment calling for the earmarking of funds is in the context of the section of title 38 which deals with prosthetic research, whereas here we are dealing with spinal cord injuries and diseases and other disabilities leading to paralysis of the lower extremities.

While these conditions frequently result in the use of prosthetic devices, the research into the causes, supported by the general appropriation for medical research, is quite different from research designed to perfect suitable appliances for the resulting disabilities. It is clearly inappropriate to make the requirement for setting aside funds for the specified area of medical research applicable to appropriations for another purpose.

For the foregoing reasons the Veterans' Administration was unable to recommend favorable consideration of H.R. 8677 by your

committee.

Senator Yarborough. Mr. Fable, the Paralyzed Veterans of America, Inc., have filed a memorandum letter briefing this subcommittee as of October 30, 1963. I believe the Paralyzed Veterans Association has officers here to testify in person on that. In light of that, we shall wait until they testify before we have questions.

But while you are here, let us go ahead with the fourth bill on the agenda at this time and finish with that. Then we will come back to H.R. 8677 after the officers of the Paralyzed Veterans testify.

This is the Hazard Park bill next?

Mr. FABLE. Yes, sir.

Senator Yarborough. I was just wondering about the bill. The number of pages in the report on that equals all the pages of the other three bills combined, so I decided it must be the Hazard Park bill.

Go ahead.

Mr. Fable. Mr. Chairman, H.R. 7751 is a bill which the Veterans' Administration strongly supports.

(The bill, H.R. 7751, with related documents, follows:)

88TH CONGRESS 2D SESSION

# H. R. 7751

#### IN THE SENATE OF THE UNITED STATES

FEBRUARY 18 (legislative day, FEBRUARY 10), 1964
Read twice and referred to the Committee on Labor and Public Welfare

# AN ACT

To extend certain construction authority to the Administrator of Veterans' Affairs in order to provide adequate veterans' hospital facilities in Los Angeles, California.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 That in order to make available an adequate site for the
- 4 proposed Veterans' Administration hospital on land known
- 5 as Hazard Park, city of Los Angeles, California, the Admin-
- 6 istrator of Veterans' Affairs is authorized to construct for
- 7 the Department of Defense an Army Reserve Center on a
- 8 site approved by the Department of Defense to be provided
- 9 for such purpose by the city of Los Angeles and pursuant to
- 10 specifications established by such Department or any com-

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- 1 ponent thereof. Such construction may be effected under
- 2 any procedure now authorized for the construction of Vet-
- 3 erans' Administration hospitals.
- 4 SEC. 2. Upon completion of such Reserve Center the
- 5 Department of Defense is authorized to (1) assume full
- 6 control and jurisdiction thereof, and (2) relinquish to the
- 7 Veterans' Administration all right, title, and interest in and
- 8 to the now existing Army Reserve Center located on the
- 9 Hazard Park tract.
- 10 SEC. 3. Funds appropriated to the Veterans' Adminis-
- 11 tration for the construction of hospital and domiciliary facil-
- 12 ities shall be available for the purpose of the first section
- 13 of this Act.

Passed the House of Representatives February 17, 1964.

Attest:

RALPH R. ROBERTS,

Clerk.

#### EXPLANATION OF H.R. 7751

This bill extends certain construction authority to the Administrator of Veterans' Affairs in order to provide adequate veterans' hospital facilities in Los Angeles, Calif.

In order to make available an adequate site for the proposed Veterans' Administration hospital on land known as Hazard Park, Los Angeles, Calif., this bill authorizes the Administrator of Veterans' Affairs to construct an Army Reserve Center on another site, whereupon the Department of Defense would relinquish to the Veterans' Administration all right, title, and interest in the Hazard Park site.

#### AGENCY REPORTS

The Veterans' Administration and the Bureau of the Budget report favorably on this bill.

EXECUTIVE OFFICE OF THE PRESIDENT,

BUREAU OF THE BUDGET,

Washington, D.C., April 2, 1964.

Hon. LISTER HILL, Chairman, Committee on Labor and Public Welfare, U.S. Senate, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: This will acknowledge your letter of February 19, 1964, requesting the views of the Bureau of the Budget regarding H.R. 7751, a bill to extend certain construction authority to the Administrator of Veterans' Affairs in order to provide adequate veterans' hospital facilities in Los Angeles, Calif.

The purpose of H.R. 7751 is to provide the Administrator of Veterans' Affairs with the authority to construct, for the Department of Defense, an Army Reserve Center as a replacement for one now existing on a site on which it is proposed to construct a Veterans' Administration hospital. The site, known as Hazard Park in the city of Los Angeles, is adjacent to the University of Southern California Medical Center and the proposed Veterans' Administration hospital will be affiliated with this medical school. The Army Reserve Center now exists on a portion of this site and the entire site is required for the proposed hospital. The city of Los Angeles is providing land on an exchange basis with the Veterans' Administration in order to relocate the Reserve Center and this authority is required by the Administrator of Veterans' Affairs to finance the replacement of the Reserve Center.

The Bureau of the Budget joins with the Veterans' Administration in recommending that H.R. 7751 be enacted.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., March 4, 1964.

Hon. LISTER HILL, Chairman, Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in further reference to your request for a report by the Veterans' Administration on H.R. 7751, 88th Congress.

The bill proposes that in order to make available an adequate site for the proposed Veterans' Administration hospital on land known as Hazard Park, Los Angeles, Calif., the Administrator of Veterans' Affairs shall be authorized to construct an Army Reserve Center for the Department of Defense and pursuant to specifications established by that Department (or a component thereof) on a site approved by the Department of Defense to be provided by the city of Los Angeles. Upon completion of the Reserve Center, the Department of Defense would be authorized to assume full control of the center and relinquish to the Veterans' Administration all right, title, and interest in and to the existing Army Reserve Center located on Hazard Park. The bill would make funds

appropriated to the Veterans' Administration for the construction of hospital and domiciliary facilities available for the construction of the Army Reserve Center.

The needs of disabled veterans in the Los Angeles area urgently require an expansion of the Veterans' Administration hospital facilities. A new 1,040-bed hospital for this purpose, at an estimated cost of \$23.5 million, has been approved by the President. We, of course, want to secure the most appropriate available site for our proposed new hospital. The paramount medical interest of the Veterans' Administration is in providing the very finest hospital care and treatment for sick and disabled veterans. As an invaluable aid in carrying out this mission, the Veterans' Administration, as I am sure your committee is aware, has for years adhered to a policy of having its hospitals located as close as possible to medical centers. The location of such centers near Veterans' Administration hospitals greatly enhances the recruitment and training of our professional personnel and promotes the efficiency of the Veterans' Administration's medical treatment and research programs, all of which add up to better care for the veteranpatient.

In the light of such policy, and after a careful survey of the Los Angeles area, we concluded that the most desirable site is a tract known as Hazard Park, owned by the city of Los Angeles and located adjacent to the University of Southern California Medical Center. In the meantime we had declared to the General Services Administration, as excess to our needs, a small portion of the reservation of our very extensive hospital and domiciliary complex located in West Los Angeles. Working through the General Services Administration and with its concurrence, an arrangement has been worked out with officials of the city of Los Angeles to exchange about 12 acres of the excess land at our West Los Angeles Center for 18 acres, more or less, of the Hazard Park tract. Hazard Park contains approximately 25 acres but the city will retain, for recreational purposes, some 7 acres not needed for our hospital site. The city plans to use the former Veterans' Administration land in West Los Angeles to provide needed park and recreational facilities in that area.

The General Services Administration is authorized under the Surplus Property Act of 1944, as amended, to convey surplus property for use as a public park or recreational area for monetary consideration equal to 50 percent of the fair value of the property conveyed, based on the highest and best use of the property at the time it is offered for disposal. Under this authority, it is contemplated that the 18-acre Hazard Park tract would be exchanged for that portion of the excess Veterans' Administration property which, if used for public recreational purposes, would be approximately equal in value to the Hazard Park tract. We understand that the city may also desire to purchase the remaining portion of our excess land for use for park and recreational purposes.

Some years ago the Department of the Army secured a 25-year lease on a portion of the Hazard Park tract on which it erected a Reserve Training Center. Unfortunately, the magnitude of our proposed new hospital and related space requirements is such as to render it impracticable to erect the hospital on Hazard Park unless some disposition can be arranged for the Reserve Training Center. H.R. 7751, if enacted, would permit us to construct a replacement Army Reserve Center and turn it over to the Department of Defense and would authorize that Department to relinquish control of the existing Hazard Park Reserve Center—thus clearing the way for its removal and construction of our new hospital.

The Department of Defense is receptive to a relocation of the Training Center—assuming that the new site and construction meet with their approval and the Center is constructed and made ready for occupancy without cost to it. In this connection, the city of Los Angeles made available several alternate sites and the Defense Department has now selected one such property, known as the Ascot Reservoir site, for the new Center. I am enclosing for the committee's information a copy of a letter from the Department of Defense dated July 17, 1963, indicating that Department's willingness to replace the Hazard Park Center and the requisite conditions; a copy of a letter of January 14, 1964, from the same Department reflecting its decision with respect to the Ascot Reservoir site; and the reply of January 24, 1964, from our Associate Deputy Administrator.

The Veterans' Administration already has \$750,000 of appropriated funds available for the purpose of securing a site for the new hospital. We are confident that this amount, or at least not more than \$1 million, will be sufficient to construct the new Reserve Training Center in accordance with De-

partment of Defense specifications and conditions. In view of their extensive experience in this type of construction, the Veterans' Administration contemplates employing the Corps of Engineers of the Department of the Army in the construction of the new Training Center.

There is no other site close to the University of Southern California Medical Center which would be suitable for the proposed Veterans' Administration hospital. Moreover, even if we were to select a more remote and less desirable site our surveys reveal that it would cost more than the proposed relocation

of the Reserve Training Center.

During the consideration of the bill in the House of Representatives, a five-member subcommittee of the Committee on Veterans' Affairs made on-site inspections of the Los Angeles area. The members of the subcommittee unanimously favored the objective of H.R. 7751. Two reports of that survey were placed in the record by the chairman of the Committee on Veterans' Affairs during the course of the debate on the measure on February 17, 1964 (see pp. 2842-2844, Congressional Record).

I strongly recommend that your committee take favorable action on H.R. 7751.

Advice was received from the Bureau of the Budget regarding a similar report on this bill to the House Veterans' Affairs Committee that there was no objection to the presentation of the report from the standpoint of the Administration's program.

Sincerely,

J.S. GLEASON, Jr., Administrator.

(Enclosure.)

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE, Washington, D.C., July 17, 1963.

Mr. W. J. DRIVER, Deputy Administrator, Veterans' Administration, Washington, D.C.

DEAR MR. DRIVER: Reference is made to your letter of June 26 concerning the construction of a new Veterans' Administration hospital in the Hazard Park area of Los Angeles, involving a site now occupied by a 1,000-man Army Reserve Center.

This Department is receptive to the proposal of your agency to provide a suitable replacement for the existing Army Reserve Center, at which time the latter would be relinquished to your agency. This Department's agreement with the proposal is predicated upon and subject to the following understandings:

(a) An acceptable new site within a reasonable distance of the existing Army Reserve Center will be made available on terms and conditions at least as advantageous as the present lease arrangements with the city of Los Angeles covering the site of the existing Center.

(b) The replacement Army Reserve Center facilities will be provided in conformance with the standard plans and specifications of this Department without cost or obligation for reimbursement.

(c) The Veterans' Administration will defray the cost of relocating installed equipment and other furnishings from the present Army Reserve Center to the new facilities.

In the informal discussions at staff level, referred to in your letter, it has not been our understanding or intention that this Department should secure the basic statutory authorization for the replacement structure, principally be cause the project is not a Defense Department requirement. We shall be glad, however, to assist in drafting the necessary legislative language and with your presentations to the Congress. Legal and engineering staff representatives are available now for collaboration with your representatives on the initial documentation.

If the amount of Veterans' Administration funds to be so utilized must be specified, it is important that the specific site for the construction be determined in order for an engineering estimate to be made of the cost of the projected facility. It, therefore, appears important that the Los Angeles officials expedite their selection of the several specific locations for Army consideration. Local offices of the Army Corps of Engineers and the XV Army Corps are being alerted to the need for expedited action on the site selection, assuming that field representatives of your agency will communicate to those offices the sites offered by the city.



Should it be desired to contact this office regarding arrangements relative to the above, your representative should call Mr. W. R. Deininger on code 11, extension 76453.

Sincerely yours,

EDWARD J. SHERIDAN,
Deputy Assistant Secretary of Defense
(Properties and Installations).

HEADQUARTERS, DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF, ARMY RESERVE,
Washington, D.C., January 14, 1964.

Mr. WHITNEY ASHBRIDGE, Assistant Administrator for Construction, Veterans' Administration, Washington, D.C.

DEAR MR. ASHBRIDGE: Reference is made to the Deputy Administrator's letter of June 26, 1963, to the Assistant Secretary of Defense (Installations and Logistics) concerning the construction of a new Veterans' Administration hospital in the Hazard Park Area of Los Angeles and also to the reply by the Deputy Assistant Secretary of Defense (Properties and Installations) dated July 17, 1963.

Subsequent actions have resulted in the introduction of H.R. 7751 by your agency and three sites have been offered by the city of Los Angeles for construction of a 1,000-man Army Reserve Center by the Veterans' Administration to replace the existing facility at Hazard Park.

The Department of Defense has authorized the Department of the Army to proceed in collaboration with the Veterans' Administration with plans and necessary arrangements for implementing the authorization contained in H.R. 7751 to the extent practicable and advisable pending enactment of the legislation. Agreement as to site and preliminary design are considered to be within the purview of this authority.

Attached is a schematic drawing showing the three sites offered by the city of Los Angeles, their location in relation to the existing Hazard Park Army Reserve Center, and certain streets to identify these locations. Site No. 3 is the only one of three sites offered that meets the requirements of the Department of the Army. When advised by your agency that construction at site No. 3 is acceptable, the commanding general, 6th U.S. Army, will be instructed to have representatives meet with any representatives of the Veterans' Administration you may designate to determine the boundaries of a specific construction site. I have appointed Col. H. C. Detlie, of this agency as coordinator for this

project. You may contact him on code 11, extension 77451.

Sincerely,

W. J. SUTTON,
Major General, U.S. Army, Chief Army Reserve.

JANUARY 24, 1964.

Maj. Gen. W. J. Sutton, U.S. Army, Chief Army Reserve, Department of the Army, Washington, D.C.

Dear General Sutton: I have your letter of January 14, 1964, to Mr. Ashbridge, advising that the Department of the Army has been authorized, pending enactment of H.R. 7751, to proceed to the extent practicable and advisable, with plans and arrangements for the construction of a 1000-man Army Reserve Center to replace the existing facility at Hazard Park in Los Angeles.

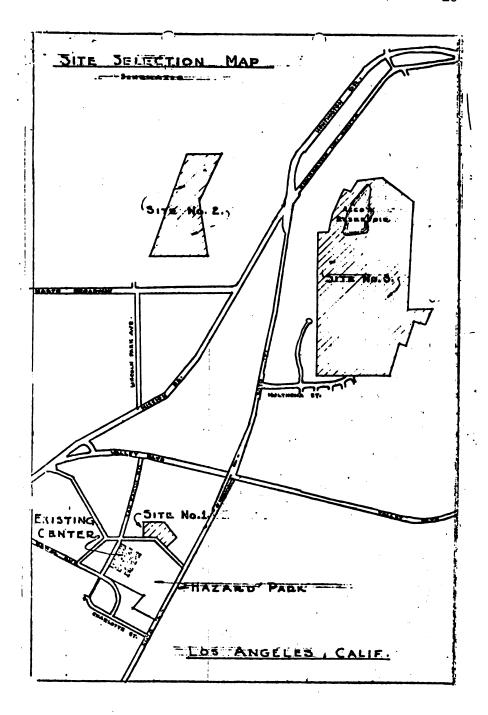
Since site No. 3 meets your needs, it is acceptable to the Veterans' Administration. As the Corps of Engineers is familiar with your requirements for a Reserve center, we hope that it will be possible for them to proceed with establishing the boundaries of the site, the development of preliminary plans, and estimate of the cost. This will be in anticipation of a transfer of funds for design and construction when the authorizing legislation is enacted.

It would be mutually helpful if your Department would continue negotiations with the city to complete a satisfactory arrangement for use of the site.

We shall cooperate fully in the effort and render any assistance you may deem necessary.

Sincerely,

A. H. Monk, Associate Deputy Administrator.



34-142 O-64--5

Mr. Fable. In order to make available an adequate site for a new Veterans' Administration hospital on land known as Hazard Park in Los Angeles, Calif., the Administrator of Veterans' Affairs would be authorized by the bill to construct an Army Reserve Center for the Department of Defense in accordance with specifications established by that Department on a site approved by it to be provided by the city of Los Angeles. Upon completion of the Reserve center, the Department of Defense, would be authorized to assume full control of the center and relinquish to the Veterans' Administration all title and interest in and to the existing Army Reserve Center located on Hazard Park.

To adequately meet the needs of disabled veterans in the Los Angeles area, an expansion of the Veterans' Administration hospital facilities is urgently required. A new 1,040-bed hospital for this purpose, at an estimated cost of \$23.5 million, has been approved by the President. We, of course, want to secure the most appropriate available site for our proposed new hospital. The paramount medical interest of the Veterans' Administration is in providing the very finest hospital care and treatment for sick and disabled veterans. As an invaluable aid in carrying out this mission, the Veterans' Administration, as I am sure your committee is aware, has for years adhered to a policy of having its hospitals located as close as possible to medical centers. The location of such centers near Veterans' Administration hospitals greatly enhances the recruitment and training of our professional personnel and promotes the efficiency of the Veterans' Administration's medical treatment and research programs, all of which add up to better care for the veteran-patient.

After a careful survey of the Los Angeles area in the light of such policy, it was concluded that the most desirable site is a tract known as Hazard Park, owned by the city of Los Angeles and located adjacent

to the University of Southern California Medical Center.

In the meantime we had declared to the General Services Administration, as excess to our needs, a small portion of the reservation of our very extensive hospital and domiciliary complex located in West Los

Angeles.

Working through the General Services Administration and with its concurrence, an arrangement has been worked out with officials of the city of Los Angeles to exchange about 12 acres of the excess land at our West Los Angeles center for 18 acres, more or less, of the Hazard Park tract. Hazard Park contains approximately 25 acres but the city will retain, for recreational purposes, some 7 acres that are not needed for our hospital site. The city plans to use the former Veterans' Administration land in West Los Angeles to provide needed park and recreational facilities in that area.

Under the Surplus Property Act of 1944, as amended, the General Services Administration is authorized to convey surplus property for use as a public park or recreational area for monetary consideration equal to 50 percent of the fair value of the property conveyed, based on the highest and best use of the property at the time it is offered for disposal. Under existing authority, it is contemplated that the 18-acre Hazard Park tract would be exchanged for that portion of the excess Veterans' Administration property which, if used for public recreational purposes, would be approximately equal to value to the

Hazard Park tract. The city has also indicated a desire to purchase the remaining portion of our excess land for use for park and recre-

ational purposes.

Mr. Chairman, I might say that up to this point, there is no need for legislative aid at all. It arises because of the point I am coming to. It arises because the Department of the Army several years ago secured a 25-year lease (which is renewable for an additional 25 years) on a portion of the Hazard Park tract on which it erected a Reserve training center. Unfortunately, the magnitude of our proposed new hospital and related space requirements is such as to render it impracticable to erect the hospital on Hazard Park unless some disposition can be arranged for the Reserve training center.

H.R. 7751, if enacted, would permit us to construct a replacement Army Reserve center and turn it over to the Department of Defense and would authorize that Department to relinquish control of the existing Hazard Park Reserve Center—thus clearing the way for its

removal and construction of our new hospital.

The Defense Department is agreeable to a relocation of the training center—assuming that the new site and construction meet with their approval and the center is constructed and made ready for occupancy without cost to it. In this connection, the city of Los Angeles has made available several alternate sites and the Defense Department is currently studying those sites to determine which would best meet the requirements of the Department for a Reserve training center.

In our formal report on this bill to your committee on March 4, 1964, we enclosed a copy of a letter from the Department of Defense dated July 17, 1963, indicating that Department's willingness to replace the Hazard Park Center and the requisite conditions. Mr. Chairman, you have already made this letter a portion of the record.

Senator Yarborough. I believe I have already ordered the departmental reports printed in the record of this hearing this morning at the place where we are hearing the separate bills. We will scatter them through the report and print these departmental reports that we have at the appropriate point in the record, where testimony begins.

In the case of the departmental report of March 4, 1964, on H.R. 7551, that includes the report of the Office of the Assistant Secretary of Defense of July 17, 1963, with the attached site selection map and the attached letter from Mr. Monk of January 24, 1964, to Major General Sutton of the U.S. Army, Chief, Army Reserve. I ask that that be printed as part of this hearing on this present H.R. 7551.

Will you proceed?

Mr. Fable. Yes, sir; \$750,000 of appropriated funds is already available to the Veterans' Administration for the purpose of securing a site for the new hospital. We are confident that this amount, or at least not more than \$1 million, will be sufficient to construct the new Reserve training center in accordance with Department of Defense specifications and conditions. In view of their extensive experience in this type of construction, the Veterans' Administration contemplates employing the Corps of Engineers of the Department of the Army in the construction of the new training center.

No other site close to the University of Southern California Medical Center would be suitable for the proposed Veterans' Administration hospital. Moreover, even if we were to select a more remote and less desirable site our surveys reveal that it would cost more than the

proposed relocation of the Reserve training center.

During the consideration of the bill in the House of Representatives, a five-member subcommittee of the Committee on Veterans' Affairs made on-site inspections of the Los Angeles area. The members of the subcommittee unanimously favored the objective of H.R. 7751. With the committee's permission, I would like to submit for the record a copy of the two reports of the members of the subcommittee covering that survey as they were incorporated in the Congressional Record of February 17, 1964.

Senator Yarborough. The reports will be received and ordered

filed and printed in the record.

(The reports referred to follow:)

House of Representatives, Washington, D.C., January 29, 1964.

Hon. Olin E. TEAGUE, Chairman, Committee on Veterans' Affairs, House of Representatives, Washington, D.C.

DEAR Mr. CHAIRMAN: On January 13, 1964, a subcommittee of the Committee on Veterans' Affairs met at the Reserve center in Hazard Park, Los Angeles, for the purpose of investigating the proposed veterans hospital site at Hazard Park.

Members of the subcommittee were George E. Brown, Jr., William H. Ayres, E. Ross Adair, and Henry C. Schadeberg. Oliver E. Meadows, staff director, and John Holden, staff member, were also present.

The subcommittee met at the Reserve center in Hazard Park at 10 a.m. Present to offer testimony or assist the subcommittee were Mr. Robert Goe, administrative assistant to Mayor Sam Yorty, of Los Angeles; Dr. Earl C. Gluckman, of the Veterans' Administration; Lowell Like, administrator of the Veterans' Administration hospital at Sawtelle; Steve Maisnek, Los Angeles City Department of Recreation and Parks; and Mr. A. H. Monk, Associate Deputy Administrator of the Veterans' Administration.

Mr. Robert Goe made a brief statement on behalf of the city of Los Angeles giving the details of the exchange of land in west Los Angeles, which belongs to the Veterans' Administration, for the Hazard Park site, belonging to the city of Los Angeles. He also spoke of the arrangements for making available an alternate Reserve center site in the vicinity of property belonging to the Los Angeles City Department of Water and Power (Ascot Reservoir site). His statement was supplemented by Mr. Maisnek, who described plans for park and recreational development at the various sites.

Members of the subcommittee interrogated Mr. Goe and Mr. Maisnek at length, as well as questioning the Veterans' Administration and Army representatives, with particular emphasis being given to the need for removal of the

present armory building and construction of a new armory.

Following the subcommittee meeting an inspection tour was made of the armory building, the Hazard Park grounds, and then the proposed alternative armory site at Ascot Reservoir, located about one-half mile northeast of Hazard Park. The subcommittee convened again at the Los Angeles City Hall where they were the guests of Los Angeles Mayor Sam Yorty for lunch.

At the conclusion of the meeting and inspection of the armory, the Hazard Park site and the Ascot Reservoir site, the subcommittee agreed as follows:

1. The exchange of land of approximately equal monetary value between the Veterans' Administration and the city of Los Angeles is an equitable and mutually advantageous transaction;

2. The Hazard Park site by virtue of its proximity to existing medical schools and hospitals, is a very desirable site for a new Veterans Administration hospital;

3. The existing reserve armory building at the Hazard Park site cannot be retained without major and costly modification of hospital construction plans;

4. The alternate armory site offered by the city of Los Angeles is adequate.

Accordingly, we are agreed that legislation authorizing the Veterans' Administration to construct a replacement armory should be approved and that the Hazard Park hospital construction plans should be funded and carried out without further delay.

Sincerely,

GEORGE E. BROWN, Jr.,

Member of Congress.

WILLIAM H. AYRES,

Member of Congress.

E. Ross Adair,

Member of Congress.

HENRY C. SCHADEBERG,

Member of Congress.

To: Hon. Olin E. Teague, chairman, Veterans' Affairs Committee, House of Representatives, Washington, D.C.

From: Representative Seymour Halpern, member of the Veterans' Affairs Committee and the Subcommittee on Hospitals.

Re: Report on the proposed site at Hazard Park for new Los Angeles veterans' hospital.

On January 5 and 6 I visited the proposed site of the new Veterans' Administration hospital at Hazard Park in the city of Los Angeles. I did so as a member of the Subcommittee on Hospitals of the Veterans' Affairs Committee after having discussed the controversy regarding this hospital with the chairman of the full committee, who felt that an on-the-scene investigation of the situation would prove most helpful to the committee.

There is no question in my mind that the site planned for the location of the hospital is ideal and impressive. As a matter of fact, I am convinced that the U.S. Government is fortunate in having such a location for this hospital facility.

My study shows a crying need for such a hospital to supplement the facilities of the existing medical center in Los Angeles which is one of the largest institutions of its kind in the world. I was also much impressed by my observations of the administration of the Los Angeles VA center under the able director, Luther Like. I wish also to commend Assistant Director Jerome Dolezal, who spent considerable time with me during my stay and contributed greatly to the background of the veteran health needs of the area and problems encountered in satisfactorily fulfilling them.

Likewise, I wish to commend Mr. Alex Garcia, assistant to Representative Edward R. Roybal of California's 30th District, covering the area in which the hospital is located.

The Hazard Park site is an ideal one—it is bounded on the north by San Pablo Street, on the south by Soto Street, on the west by Zonal Avenue, and on the east by Norfolk Street. I do not believe there could possibly be a more appropriate location for a veterans' hospital to meet the needs for this evergrowing area of southern California. As planned, the hospital will contain 1,040 beds, of which 800 will be general medical and surgical; the remaining 240 will be for neuropsychiatric patients. The location is consistent with the current Veterans' Administration policy to situate its hospitals adjacent to, or in close proximity to, medical schools. In this instance, the University of Southern California Medical School (McKibben Hall and Raulston Medical Research Center) is directly across the street from the north side of the proposed Hazard Park hospital site on San Pablo Street.

Also facing on San Pallo Street diagonally across from the proposed site is the Los Angeles County Hospital, which is affiliated with the University of Southern California. The excellent reputation of this hospital is widely known and should prove an invaluable asset to the veterans hospital. Thus, the great advantages of locating the hospital at this location are irrefutable. They far outweigh the problems that have arisen relative to locating the hospital there—paricularly those arising from the local community, but none of which are serious enough, I believe, that they cannot be amicably resolved.

As I see it, there are five issues to be resolved in order to satisfactorily fulfill the objective of building the much-needed hospital and yet not create any disadvantage to the needs of the local community. They involve:

1. The transfer of the Hazard Park property owned by the city of Los Angeles to the U.S. Government in return for appropriate property owned by the U.S. Government.

2. The problem of what to do with the existing U.S. Reserve Center, which occupies about 5 acres of the 25 acres of the total site. This armory, which cost about \$500,000 to build, is being considered for practical utilization as part of the hospital. Or, if determined impractical, for this purpose it would have to be relocated which would involve the acquisition of a suitable site and the cost of at least \$1 million to reproduce at today's construction estimates.

3. The problem of providing for appropriate recreational area to substitute, at least in part, for the 20 acres of Hazard Park that would be taken away from the community which has a desperate need for such playground and recreational

facility.

4. The availability of adjacent city property which the Government could acquire to utilize for parking purposes, making it possible in turn for the city to retain 8 acres of the lower end of Hazard Park (south of the unused railroad tracks which cut clear through the property) and provide minimal but accept-

able recreational area.

In regard to point No. 1, I understand that the city of Los Angeles has agreed to relinquish the 20 acres constituting Hazard Park to the Federal Government (the 5 remaining acres of the total 25-acre site is now held by the U.S. research center property owned by the Government) and in turn receive from the United States 10 acres of desirable and much-needed park land in the west Los Angeles area. This has been fully agreed and there is no obstacle on either governmental level.

Point 2 raises one of the key questions that has developed in connection with this site. It involves the question of what to do with the existing armory which was built originally for \$500,000 and would cost at least million dollars to reconstruct today. It is located on the prime location on the site directly facing the University of Southern California Medical School; diagonally across from the armory is the county general hospital. The building is so constructed and so laid out that I find it inconceivable that it would serve any purpose to the medical center. If anything, it would appear to be a handicap, depriving more effective utilization of its ideal location. To properly reconvert it or to build the hospital around it would prove, I am sure, to be more costly than the million dollars it would take to reconstruct it elsewhere.

There is no obvious reason that I could determine which would require that the location of the armory be in the immediate vicinity. There is other Government-owned land in the Los Angeles area that I think would be most appro-

priate for a new armory.

Or, it would not be much of a problem to acquire nearby land, which I understand is available, from the city of Los Angeles as part of this overall trade to build the armory even if it is determined that it must remain in the immediate area.

It is my conviction that in the best interests of the medical center and for ultimate economy that the armory facility be relocated from the site, and that the

existing building should not be considered as part of the hospital setup.

Points 3 and 4 involve a local controversy which has become one of the major obstacles in connection with the hospital. The surrounding area is largely inhabited by folks in the low-income category. There are no park facilities other than those provided in Hazard Park for many miles around. To take Hazard Park in toto away from the area would be a grave injustice to the local community and would instead create many unfortunate situations which far outweigh any advantage of acquiring the entire acreage of the park.

A study of the situation reveals that the entire matter could be easily resolved by turning the lower portion of the park separated from one end to the other by obsolete railroad tracks and covering approximately 8 acres. The civic community and local authorities have proposed a beautiful recreational area for this acreage. It includes playgrounds, baseball courts, picnic facilities, etc. The cost to convert it for such purpose is extremely small, amounting to only \$60,000.

It is understood that the reason the Government would like this acreage as part of the hospital site is that it would be ideal to provide the necessary parking facilities since the immediate area is almost devoid of such available space. However, I find that there is city property adjacent to the west side of the site running north and south that could conceivably serve the parking purpose (the north end might also be considered for the relocation of the armory building). This area totals approximately 6 acres, 3½ of which are at the north end owned now by the Department of Water and Power of the city of Los Angeles and not serving any use.

The lower 2½ acres belong to the board of education, and as far as I can determine it is not serving any valuable purpose whatsoever. There is a vacated building on the latter property; the former is primarily wooded land. It seems highly probable that these 6 acres could be suitable substitute for the 8 acres below the railroad that could be retained by the city for the needed recreational purposes.

If more space would still be required for parking there is another 1½ acres that jut the board of education department of water property that is not valuable

land and could be acquired reasonably by condemnation.

All these questions, I feel, can be easily resolved. There is a cooperative spirit on the part of the Federal and local governments, and I see no obstacles to reaching agreements satisfactory to both sides.

I strongly recommend that the committee approve the pending legislation so that this much needed, most commendable hospital project can get on its way.

Respectfully submitted.

SEYMOUR HALPERN, Member of Congress.

January 15, 1964.

Senator Yarborough. Off the record.

(Discussion off the record.)

Mr. Fable. Mr. Chairman, we believe that Hazard Park is the most desirable site for the proposed new hospital in the Los Angeles area and would best meet the needs of disabled veterans in that area for additional hospital facilities. At the same time, the use of this site will not adversely affect the training activities of the Department of Defense and, finally, will be the least costly choice for the new hospital. Under the circumstances, the Veterans' Administration very strongly urges the bill's favorable consideration by your committee. The Bureau of the Budget has advised that there is no objection to the presentation of these views on H.R. 7751 from the standpoint of the administration's program.

Mr. Chairman, this concludes our formal statement on the veterans' bills pending before your subcommittee. As I stated at the outset, we will be pleased to answer any questions the members may have concern-

ing these proposals.

Senator Yarborough. Mr. Fable, I think you and your staff have made a very fine, clear statement on this Hazard Park bill. I think it is necessary, because in my experience in the Senate, when a bill comes up that deals with buying or selling of Government land, it is questioned far more closely than appropriated Government money. There is something about land that causes people to be more concerned about title to it and what is going to happen if the Government disposed of some. So I think this full explanation and very carefully documented report will be very valuable to us when we go before the Senate.

Mr. Fable. May I add one point? I was informed this morning that after this statement had been prepared, it has developed that the authorities in Los Angeles may lack the authority to convey land which has been donated to them for park purposes. Because of that, there will probably be a condemnation action taken between General Services Administration and the city of Los Angeles solely for the purpose of complying with the legal technicalities.

Senator YARBOROUGH. Was that Hazard Park property donated

to the city of Los Angeles?

Mr. Fable. I believe that is the case. Mr. Knapp, can you speak to that?



Mr. Knapp. I believe it was received by the city as park and recreational property. Then, due to a provision in the city charter it has developed that the city is foreclosed from conveying it for any other purpose. So as a result of that, the title will be received through condemnation by the Federal Government and in turn the consideration therefor will be the parcel of our West Los Angeles facility.

Senator Yarborough. Was it donated under a will or gift, or did the

city buy it for park purposes?

Mr. Bowie. The only thing I can find on that is that it was transferred to the Park Commission, City of Los Angeles some years ago with the restriction that it be used for park purposes.

Senator Yarborough. Then my statement that it was donated in

a will—of course, if the city bought it itself—

Mr. Bown. I didn't go back that far in my review of the title and I

am sure I could not tell you.

Senator Yarborough. I am sure the counsel for the Veterans' Administration, counsel for the Defense Department and counsel for the city of Los Angeles have all those matters before them.

Mr. FABLE. Mr. Chairman, this is really a collateral matter but I wanted to bring it up in the event that in the debate on the floor, if

there is a debate, it will be known.

Senator Yarborough. Thank you.

Mr. Fable, if you will step aside, we will hear from the officers of the Paralyzed Veterans Association and then we will come back for questions on H.R. 8677.

Mr. William Green, National Research Director of the Paralyzed Veterans of America; accompanied by Mr. John J. Farkas, president of the Paralyzed Veterans of America.

Gentlemen, proceed in your own way.

## STATEMENT OF JOHN J. FARKAS, PRESIDENT; ACCOMPANIED BY WILLIAM P. GREEN, RESEARCH DIRECTOR, PARALYZED VETERANS OF AMERICA

Mr. FARKAS. Mr. Chairman, gentlemen of the subcommittee, it is a pleasure to be allowed the privilege to testify. I would like to introduce our director of research of the Paralyzed Veterans of America, Mr. William Green, who will give our statement to the subcommittee.

Mr. Green. Mr. Chairman and members of the subcommittee, it is most gratifying to be allowed the privilege of giving our views on the spinal cord research bill, being considered by this subcommittee.

The Paralyzed Veterans of America is an organization of veterans afflicted with a spinal cord injury or disease. We have both service-connected and non-service-connected veterans in our membership—a total of about 3,800. We are proud to claim that we have a greater percentage of our potential membership than any other veterans' group.

The medical term for the condition is known as paraplegia. It describes a paralysis of both lower extremities and the bowels and bladder. Coattendant with the paralysis are the problems of spasm, urinary infections, pain, incontinence, decubitus ulcers, and atrophy. These problems indicate why we have a particular interest in the pro-

motion of spinal cord research.

The PVA in 1947 organized and sponsored the National Paraplegia Foundation in order that a direct effort could be made to carry on research in the problems of spinal cord patients. We are proud and pleased that this group has grown and is engaged in support of research projects and studies relative to the problems.

The Paralyzed Veterans of America in their last convention in Miami last July adopted a program to bring further effort into the search for solutions and betterment of treatment for all paraplegias.

This bill now being considered is a part of our efforts.

The history of the treatment and rehabilitation of spinal cord patients is one of the bright pages to come from World War II. Man's ability to spread destruction and death had outrun the ability to repair, and the philosophy that man must always endeavor to seek the secrets of nature and use them for the benefit of man was almost forgotten. The preservation of our lives through the use of miracle drugs actually created a problem of what were they to do with us. In 1945, the Army started a program of rehabilitation. The patients were grouped together in six hospitals; and with the devotion of a few dedicated doctors, there began a program that has attracted world-wide respect.

In 1946, the Veterans' Administration took over the responsibility of care and treatment of the paraplegias. The center concept has been maintained to a degree, but the search for answers in paraplegia has

lost its impetus.

In the paraplegia centers, which have one-half of the VA paraplegia hospital census, there exists an excellent opportunity to study large groups of our peculiar injury. This is more important when one realizes that this condition exists in only a few civilian institutions. The techniques and methods of treating the veteran group learned in these centers are benefiting many others in our vast country and the world.

But, the emphasis for research programs has followed the public relations campaigns and the great beginning is becoming forgotten in the rush to stand in the glare of the public spotlight.

We do not object to the VA doing research in other necessary fields. We only ask that they also show concern in solving spinal

cord injury and disease problems.

We do not claim that there are no projects being pursued that will benefit us, for there are many related fields where there is work being done. We do point out, however, that there is no designation of spinal cord projects as such by the Veterans' Administration. The amounts of money spent on research by the VA should be directed, in part at least, toward the types of patients they are concerned with treating and toward the betterment and preservation of the unique programs developed by overcoming difficult obstacles. This is a VA responsibility inherited in an unbroken line from the philosophy of the Massachusetts Bay Colony, which in 1647 wrote the first veterans' law of this country in order to care for its defenders.

There are other facets, as well as the faithful performance of a duty to be gained by the program envisioned in the spinal cord research bill. The VA has a problem in staffing. The present outlook toward solving this for the paraplegia centers looks very dismal. In fact, we are very much concerned lest the entire program would



disappear in a few years. The only solution is to attract new doctors and improve the image of SCI treatment by giving it status equal to the other attractive specialties. Research can help to achieve this. The mind of man has never turned down a real challenge.

One can rightfully ask, "What are you doing to help yourself?" for PVA has always sought to have our efforts and accomplishments used as the basis for judgment. In our 1963 convention, we endorsed

a program which includes the following points:

(1) Donation of \$15,000 over a 2-year period to the National Paraplegia Foundation to support an Office of Vocational Rehabilitation study project.

(2) Donation of \$10,000 over a 2-year period to support California research projects, which, incidentally, are being done in the VA

hospitals in Long Beach.

(3) Donation of \$2 per member to designated organizations. Each chapter designates the recipient of their share.

(4) The spinal cord injury essay contest for senior medical students.
(5) Investigate the possibilities of publishing a book on care of

spinal cord injury patients.

(6) The spinal cord research bill to require the VA to spend \$100,000 per year for spinal cord research.

This program will cost us \$43,000 over the 2 years, and at present

is progressing very well.

In the bill before this subcommittee, we feel that the \$100,000 per year for 7 years could be effectively administered with very little expense on the part of the Veterans' Administration.

We suggest that—

- (1) A committee consisting of the Chief of Spinal Cord Injury Staff VACO, the Chief of Prosthetics VACO, the Chief of Physical Medicine VACO, and the Chiefs of the Spinal Cord Injury Services and Sections be charged with the duty of selection of spinal cord research projects, and act as an advisory committee to the VA Research Committee.
- (2) The clinical investigator program can be used on spinal cord injury services and sections.

(3) Two special laboratories be established.

(4) Spinal cord injury projects be labeled as such.

In summary, PVA has attempted to indicate that we have a life-ordeath interest in this bill, not only as it relates to our programs of treatment but to our persons as well. We, as an organization, are trying to build a better future for all paraplegias. We only ask that the Congress help in this endeavor by passing H.R. 8677.

We also have included, Senator, a propaganda sheet on our spinal

cord injury essay contest.

Senator Yarborough. Would you like to have that printed in the record?

Mr. Green. Yes, if you will, please.

Senator Yarborough. There is ordered printed in the record a statement from the Paralyzed Veterans of America, Inc., announcement of a prize contest for essays on spinal cord injuries by senior medical students.

(The document referred to follows:)

PREPARED STATEMENT OF PARALYZED VETERANS OF AMERICA, INC.

ANNOUNCEMENT-PRIZE CONTEST FOR ESSAYS ON SPINAL CORD INJURY BY SENIOR MEDICAL STUDENTS

1. The Paralyzed Veterans of America, Inc., announces a prize contest, open to members of the class of 1964 in the medical schools of the United States and Canada, for essays describing original work, clinical or experimental, on any subject bearing upon the study of spinal cord injury or the treatment or rehabilitation of spinal cord injury patients.

2. The prizes will be three first prizes of \$300 each and three second prizes of

\$200 each.

- 3. Essays will be judged on the basis of originality, scientific validity, clarity of expression, and such other criteria as the committee of judges may establish. The decisions of this committee will be final and it may withhold any or all of the prizes if, in its opinion, the essays are not of sufficient excellence to merit award.
- 4. All essays will be submitted anonymously, each copy distinguished by a legend. Within an accompanying sealed envelope, marked with the legend, will be the author's name, address, medical school and class, certified by an appropriate official of the school. Mention within the body of the essays of the names of schools, hospitals, or other institutions should be avoided. These may be added later for publication.

5. The judges will attempt to arrange publication of suitable essays, whether prizewinners or not. They will also be available to advise contestants who may be interested in further work in the field of spinal cord injury.

6. The committee of judges will be as follows: Dr. H. S. Talbot, Dr. Ernest

Bors, and Dr. A. T. Jousse.

7. Essays should be written in English or French and not exceed 5,000 words in length. They should be typed, double spaced, on one side of letter-size paper, and submitted in triplicate, along with the identifying envelope to: Paralyzed Veterans of America, New England Chapter, VA Hospital, West Roxbury, Mass.

8. The closing date for receipt of entries will be December 31, 1964.

9. All contestants will be notified of the results as soon as possible after completion of the judging.

Senator Yarborough. Now, as written, this H.R. 8677 says each fiscal year, in the period beginning July 1, 1964, and ending June 30, 1970, the Administrator shall set aside not less than \$100,000 for such appropriation of funds for the conduct of research into spinal cord injuries and diseases and other disabilties that lead to paralysis of the lower extremities.

This refers back to section 216(c). I have a note here that says that this would mean that this \$100,000 would be taken from appropriated funds for paraplegic research. Is that 216(c)—I want to ask the Veterans' Administration.

Mr. Bronaugh. This will be taken out of prosthetic research—this \$100,000.

Mr. Fable. Yes, it would, sir. That is one of the reasons why we feel the bill as introduced should not be favorably considered by the subcommittee.

Senator Yarborough. If this is set aside, would it not be better to take this from all appropriated funds for medical research of the VA rather than out of the-

Mr. Green. I am glad you brought that point up, Senator. The 216 section of title 38 is entitled "Research by the Administrator."

Of course, (a) and (b) sections do refer to prosthetics; (c) says there are authorized to be appropriated annually to remain available until expended such funds as may be necessary to carry out this section. Now, this might imply that only those funds which are used for prosthetics would be used, but I believe that the intent of our bill, to begin with, was that it would be taken out of the general research funds. This, I see, is a little restrictive here. I think it would be better to take it out of the general \$30 million which is spent overall.

Senator Yarborough. That it be taken out of the general fund, and

that the bill be amended to that extent?

Mr. Green. Yes.

Senator Yarborough. Mr. Green, do you have any comment on Mr. Fable's testimony that expenditures on spinal cord research for fiscal year 1963 are estimated to have been over \$300,000 if there are included all the expenditures for research directly or indirectly related to spinal cord injury and disease? Do you have any comment on that?

Mr. Green. Yes; you spoke the right word in saying "indirectly."

This is our point, Senator.

We do not dispute that they are carrying on research in fields which could be related to spinal cord injury. The same as any research in any medical field could eventually filter down to be used in our projects. But if you go through the spinal cord injury centers where you have a thousand patients in six big centers and you ask how much is spent directly in projects which are labeled "spinal cord injury" projects, I am sure that you will be very shocked, because very little is spent directly on their research projects.

We have had a few projects which have been done and there are studies which are going on most of the time, but we do not feel that these things have been directed toward our problems. We do not see any of the real emphasis put on the research within our own area.

For instance, I come from what I consider, at least, one of the finest centers that there is and we have one project going on now which was a study in urology. That is being done by the urology department; it is not being done by the paraplegia or spinal cord injury people. What we want is to bring some attention to this problem. We feel that we have to do something to attract people into our field of treatment. We feel that within 3 years' time we are going to be in a very serious situation through the loss of doctors, because most of our doctors are getting to the retirement age.

In our center alone we have had an opening for a staff doctor for over 9 months and, as I say, we enjoy one of the best reputations in the business. If we cannot attract somebody in it, then we have to make something that is going to attract them in. The thing which is attracting people into the medical field today is research or the opportunity for research. This is what they are all looking for.

Senator Yarborough. You do not agree, then, with Mr. Fable's

Mr. Green. I do not agree with it entirely; no, not at all.

Senator Yarborough. Your objection is that this statement, "directly or indirectly related to spinal cord injury and disease"—that is the problem, that it is indirectly related to it rather than directly? Mr. Green. It is related. It may be related away off in some other

area. But what we want is something which is going to come right

directly down to our problems.

Senator Yarborough. With this adverse recommendation from the Veterans' Administration and the strong support for this measure which has already passed the House by the Paralyzed Veterans of America, Inc., it seems to me that it would be helpful to this subcommittee if we had more detailed information of what research is actually being done in this field.

I am going to ask if you can supply that or if the Paralyzed Veterans have some information on that. There is a very strong relation between your organization and the Veterans' Administration on this, Mr. Green, so I would like the subcommittee to dig a little deeper

and see what the situation is on this.

Mr. Fable. Mr. Chairman, I have here the breakdown of the over \$300,000 expended in this area in fiscal year 1963, which I would like to offer for the record, if I may, sir.

Senator Yarborough. All right. We will order that printed in the

record.

(The material referred to follows:)

SEPTEMBER 24, 1963.

#### SPINAL CORD RESEARCH FUNDS SUPPLIED, FISCAL YEAR 1963

Since funds allocated to a station for neurological research are determined on the basis of salary needs and equipment and supply requirements, it would be impossible to assign an exact cost figure to each project.

At the VA hospitals, Palo Alto, Calif., neurology research was allocated \$61,325 last year. It is estimated that \$25,000 of this sum was devoted to spinal cord

research.

At the VA hospital, Hines, Ill., neurology research was allocated \$142,570 last year. It is estimated that at least \$75,000 of this sum was devoted to spinal cord research.

At the VA research hospital, Chicago, Ill., neurology research was allocated \$110,816 last year. It is estimated that at least \$40,000 of this amount was

devoted to spinal cord research.

At the VA hospital, Long Beach, Calif., neurology and basic science research were allocated \$165,486. Of this total, it is estimated that at least \$75,000 was spent in spinal cord research.

At the VA hospital, Iowa City, Iowa, neurology research was allocated \$29,761. Of this sum, it is estimated that \$8,000 was devoted to spinal cord

research.

At the VA hospital, Salt Lake City, Utah, neurology and neurosurgical research were allocated \$93,774. It is estimated that approximately \$40,000 of this total was devoted to spinal cord research.

At the VA hospital, West Roxbury, Mass., where most of spinal cord research is devoted to genitourinary studies funded in the surgical cost center, \$165,983 was allocated to surgical and neurologic research. It is estimated that at least \$75,000 of this total was devoted to spinal cord research.

WARREN V. HUBER, M.D.

Senator Yarborough. May I see it for a moment, Mr. Fable? We will see what it says.

Supply a copy to the officers of the Paralyzed Veterans Association. We are going to hold the record open for a week so you may have an opportunity to answer anything that is said today, if you wish.

Does counsel for the subcommittee have any questions?

Mr. Johnston. No.

Senator Yarborough. Counsel for the minority?

Mr. Stringer. No.



Senator Yarborough. If there are no further questions by counsel, or if you gentlemen have comments on this, you may comment on this memorandum of the Veterans' Administration at this time. If you wish to put something in the record, the record will be open for a week and you may file a memorandum, if you prefer.

Mr. FARKAS. We will file a memorandum, sir.

Senator Yarborough. Any information the subcommittee gets on this subject will be very helpful to us. We are going to be asked about this by the full committee when this subcommittee reports to the full committee. When they see this sharp difference, they are going to want to find out what the reason is for the difference between you and the Veterans' Administration, so any information we can get will be helpful on this.

I believe we have another witness present who was not listed here this morning; we have our old friend, Francis Stover, director of the National Legislative Service of the VFW. He has appeared before us

many times, and always has some helpful information for us.

Thank you, Mr. Green and Mr. Farkas, for your very cogent testimony and the way you boiled it down to three pages.

### STATEMENT OF FRANCIS W. STOVER, DIRECTOR, NATIONAL LEGIS-LATIVE SERVICE, VETERANS OF FOREIGN WARS OF THE UNITED STATES

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

It is always a pleasure to appear before this very distinguished subcommittee which has devoted so much time to the consideration of legislation for veterans and their dependents.

This morning, Mr. Chairman, I would like to start out by saying that the Veterans of Foreign Wars has no official position concerning

three of the bills.

However, in the case of S. 2636, the Senate bill which would provide that the Administrator of Veterans' Affairs afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental distbility which handicaps the child in the pursuit of his educational program, the Veterans of Foreign Wars has no position on this. It was never brought to the attention of our delegates or our National Council of Administration. However, I feel certain that our delegates and the national organization would lend its fullest support to this provision and I hope that maybe it can be passed along as an amendment to H.R. 221, the education bill which passed the House and the Senate and gone back to the House. I hope that both of these bills can be passed at least in time so that the children will benefit by these bills and take advantage of the program beginning with the next school year in September.

Senator Yarborough. Thank you for your comments on this bill. Mr. Stover. However, in the case of H.R. 8677, the Veterans of Foreign Wars has lent its fullest support to this legislation which is designed to help veterans whose spinal cords had been severed or otherwise rendered them paralyzed from the waist down. These veterans are referred to as paraplegics and constitute a small but highly deserving group of veterans who have need of special attention and help.

The purpose of this bill is to make certain that the Administrator will set aside a minimum amount of not less than \$100,000 of appropriated funds for medical and prosthetic research. For fiscal year 1965, \$36 million has been approved by the House in the field of medical and prosthetic research. This bill would simply authorize the Veterans' Administration to spend at least \$100,000 in the field of spinal cord

injuries and diseases.

Mr. Chairman, the record should show that the Veterans of Foreign Wars has always strongly supported the research programs carried out in the medical field by the Veterans' Administration. The Veterans' Administration hospitals, numbering 168 and located in 48 of the 50 States is an ideal laboratory for the conducting of research projects. The Veterans of Foreign Wars has always pointed with great pride to the many discoveries and improvements in the medical field by the Veterans' Administration, which benefits are not limited to veterans but help all mankind. The Buffalo Veterans' Administration Hospital is credited with developing and perfecting the heart machine which is called the Pacemaker, and according to newspaper reports saved the life of the noted British actor, Peter Sellers, who recently suffered a series of severe heart attacks.

Discoveries by the Veterans' Administration in the field of tuberculosis are well known and have led to the abolition of this type of hospital. No longer is it necessary for most tuberculosis patients to languish for many years in hospitals. In the field of psychiatry the Veterans' Administration hospital system is devoting a tremendous amount of time and research in the treatment of neuropsychiatric patients. Over half of the patients in Veterans' Administration hospitals, or approximately 55,000 on a daily basis, are classified as neuropsychiatric and this has been the basis for the great strides and improvements by the Veterans' Administration in the care and treatment of this type patient.

Hope springs eternal, Mr. Chairman, and the Veterans of Foreign Wars is urging your favorable consideration of this bill, H.R. 8677, to let these wheelchair veterans know that their Government is continuing

to do everything possible to find new ways to help them.

Since our organization has no official position concerning the three other bills before you, this completes my testimony. I thank you again for this opportunity to lend our support to one of the most meritorious bills introduced in this Congress.

Thank you, Mr. Chairman.

Senator Yarborough. Thank you, Mr. Stover, for your very forceful statement.

Are there any questions by counsel?

Mr. Johnston. No questions.

Senator Yarborough. Any questions by minority counsel?

Mr. Stringer. No, sir.

Senator Yarborough. Thank you very much.

Gentlemen, do any of the other witnesses have any supplementary statements to file at this time about any of these bills?

Mr. FABLE. Mr. Chairman, Dr. Kaim would like to speak to the statement which was offered in the record concerning our expenditures for 1963.

Senator Yarborough. The Veterans' Administration statement?

Mr. FABLE. Yes, sir.

Senator Yarborough. All right; come around.

May I ask you gentlemen, Mr. Green, Mr. Farkas, and Mr. Stover, who have given your testimony here, that the  $V\Lambda$  is going to offer some more testimony on what they have given us on the memorandum of expenditures for research in this field?

I suggest that you listen carefully because there may be a matter that you gentlemen would want to comment on later. We are going

to keep the record open for a week.

Dr. Kaim. Mr. Chairman, I think that we in the Veterans' Administration Department of Medicine and Surgery have exactly the same objectives as the gentlemen who have testified for the VFW and the Paralyzed Veterans Association. We share with them the same concern, we are indeed most anxious to do the most we can for these most deserving veterans. They are a small segment of the veteran population but among the most deserving of all injured and disabled veterans.

I think it boils down to a matter of terms and definitions. When we say that we are spending well over \$300,000 yearly, directly or indirectly concerned with paralysis of the lower extremities, this includes basic research such as neurophysiologic research, research into neurochemistry, research into the single nerve cell in the spinal cord; also, research in urology. These people suffer from many diseases of

the bladder and kidney.

We are trying to do all we can in our research effort to help their urologic problems as well as their neurologic problems. Our funds derive from neurology research, urology research, surgical research, basic science research. We have very conservatively estimated that we are spending now well over \$300,000 a year. The only difference that we have with the veterans' organizations on this bill is the fact that it sets a precedent whereby we are directed to do research in a fragmentized manner. This may set a precedent which may really detract from our research efforts. It is very difficult to direct scientists into one or other area of research.

A \$100,000 program may indeed handicap our efforts in that this may then represent the ceiling rather than a minimum. This sometimes may happen.

We are against this bill for these reasons and again, I must stress that we are indeed 100 percent for the objectives of these veterans'

organizations.

Senator Yarborough. Doctor, you have heard the statement by the officials of the Paralyzed Veterans of America, where they pointed out that in past wars, people who received that type of injury on the battlefield probably would not have survived, but now due to new

drugs they have survived.

Under the impetus of this greatly improved treatment and care of spinal cord injuries and other types of injury, such as those in the field of orthopedic surgery, we could say after World War II, due to the large number of men injured in these areas, there was a great advance. They say in their statement that after this great public beginning the urge and drive in that field is now being lost. It is tapering down, losing the urge and drive. That is the gist of the position of the Paralyzed Veterans Association as I understand it. They feel the urgency to solve these problems has been lost, has been tapering off

and they want a new emphasis, new resolution, and new drive. That seems to be the main difference as I see it here. They want money

in there to encourage people to go into this type of research.

Dr. Kiam. I visited the Long Beach hospital earlier this month and was very impressed with the excellent service they have for paraplegic veterans. It is really a commendable service and one that treats not only the hospitalized paraplegic veterans but also the outpatient. They have a very systematized, extremely good method of treating these veterans as they come in on an outpatient basis. are also doing excellent research at Long Beach, mostly in the basic sciences. This is where the big thrust may occur, mostly neurophysiological and chemical rather than clinical research. This is just a matter of terms and definitions. We feel we are doing pioneer work and perhaps doing the best work in the world because we do have more of a conscience, perhaps, in this country than in many other countries toward our veterans. Therefore, our only fear is that by segregating these funds, we are fragmentizing research, we are trying to do something artificial which I think will be deleterious to our effort in the care and treatment of the paralyzed veteran.

Senator Yarborough. Does the basic research include research with animals with warm blood, mammals that may have a spinal cord

injury?

Dr. Kaim. Yes, sir. We are doing one of these types of research at one of our centers at West Roxbury. Dogs are one of the chief animals used where experimental lesions are made and then many basic and applied research programs have been, are ongoing in this West Roxbury hospital in Massachusetts, at present.

But we have many animal experiments going on having to do with paralysis—neurochemical work at the Chicago Research Hospital. There we are expending many thousands of dollars in this basic research. This is where we think that our money is well spent in that only through the basic research will we get the real answers as to

where our clinical approaches may pay off.

Senator Yarbrough. And it is the hope of those in this research that in the basic research, the nature of the nerve cell and other types of basic research, that there may be a breakthrough in man's knowledge to be applied in the clinic? The clinical research is on people who might be restored if we once get to the point of restoring these individuals. An article in the publication entitled Clinical Neurosurgery, vol. 8, "Proceedings of the Congress of Neurological Surgeons, Chicago, Ill., 1960," beginning on page 294, has been brought to the subcommittee's attention. It appears to be an excellent article and contains some information on this problem. Therefore, without objection, I will order this article printed in the appendix of this hearing for the information of the committee. The pictures contained in the article might not come out, but I think the charts will, and I am going to ask the printer to do his best on the pictures and if they do not come out well, then our readers will understand.

Any further questions?

Mr. FARKAS. Mr. Green has a question with reference to the remark on research on animals.

Mr. Green. Mr. Chairman, may I make a statement in rebuttal to the doctor? He brought up two of the finest paraplegia centers that this country or the world knows. California under Dr. Bors is undoubtedly one of the greatest that there is, and West Roxbury, which

is under Dr. Talbot; it was developed under Dr. Talbot.

The California Research Laboratory, most of the equipment is provided through the California Research Association, which is supported by the paralyzed veterans. We have also just given Dr. Bors \$5,000 to carry on research this year for two projects.

We will give him \$5,000 for next year. In addition, I believe there is about \$3,000 being given to him to do what he wants with it. Now,

that is the California field.

The West Roxbury Hospital has a census of about 125 paraplegic patients and a total bedload of about 304 beds in the hospital. We did have a colony of paraplegic dogs at West Roxbury. That happens to be the hospital laboratory. Those dogs are no longer in existence, because the funds were not available to carry on the research program in spinal cord injury.

Mr. FARKAS. They were not destroyed; they were used for other purposes, Mr. Chairman, such as urology and other. But they have served their purposes other than spinal cord research. They were used in urology and other, and naturally they are no longer there. There is no colony of dogs in West Roxbury for the last 2 years.

Mr. Green. There is a colony. They do have a dog laboratory. But

as far as the colony of paraplegic dogs, it is no longer there.

Dr. Kaim. The urology service and the surgical services have done the bulk of the research at West Roxbury with animals. Again, this is perhaps a definition of terms. I have not visited that hospital. I cannot say what they are doing today. As I am in the psychiatry and neurology research department, I do not have adequate knowledge of the funds supplied for urology and surgery.

In 1963, I think this amounted to well over \$100,000 at West Roxbury. I cannot say what they are doing today, though. I have not

visited that hospital.

I can supply that for the record subsequently.

(The information requested follows:)

## Supplemental Information Furnished by Veterans' Administration Concerning Research at VAH, West Roxbury

During fiscal year 1963 the following projects supported at the VAH, West Roxbury, were pertinent to spinal cord problems:

(1) Studies on the physiology of micturition: The dynamics of uretero-vesical function.

(2) Factors influencing the development and healing of pressure ulcers.

(3) Total blood volume in spinal cord injury patients.

(4) Development of method of removal of vertebra from the spine.

(5) Use of recording tidal drainage apparatus to study and improve present bladder training procedure.

(6) Investigation of renal function in paraplegics.

In addition these projects required no additional research funding:

(1) Study of electrical action potentials in the urinary bladder.

(2) Effects of prolonged catheterization.

(3) Intra-vesical pressures during tidal drainage.

Ongoing projects (in fiscal year 1964) pertaining to spinal cord problems include:

(1) Relation of hypertension to pyelonephritis.

(2) Renal function in paraplegics.

(3) Trauma to uretero-vesical bladder wall.

These current projects receive research funding totaling approximately \$12,000. There are six projects scheduled for fiscal year 1965 which have been allocated \$20,000. In addition, several clinical research projects pertaining to spinal cord problems require no special research funding.

Reexamination of estimates previously submitted at the hearing established that the \$75,000 shown as an estimate of spinal cord research at the VA hospital,

West Roxbury, Mass., should be adjusted to approximate \$15,000.

Senator YARBOROUGH. I think it would be well, Doctor, to supply that for the record. For that reason, we are leaving the record open, because we have had these hearings and other members are going to ask what about this dispute, who is right about this?

Now, I am leaving the record open for a week for detailed supplemental information. I realize the strength of the Veterans' Administration position that this should not be fragmentized and their research compartmentalized to say you have to do this, that Congress should not say to the scientists and doctors, you have to research here.

On the other hand, if this research into the spinal cord has been shunted aside and a very strong showing made here that it has not been given the emphasis that they feel it should be given if there is going to be a final solution to the problem, we need to know that in

order to authorize appropriations.

I know in the health subcommittee, we were having a hearing here a few years ago on our National Institutes of Health appropriations. We increased them very drastically in the last 10 years, from less than \$100 million a year to nearly a billion dollars a year in research.

One of the eminent doctors who was testifying said if this country wanted an answer to cancer, it could find an answer to cancer. They would have to go in like they did to find the answer to nuclear fission and the atomic bomb.

I asked what would it take if we wanted a breakthrough on cancer? He said a billion dollars a year on cancer alone and it was then \$25 million.

I said "I am ready to vote for it."

He said, "We do not have the trained personnel. We could not use any more, because we do not have the people trained in research with the tools. This has to be built up slowly."

Now, do you concur in Mr. Green's statement that you have one position at Long Beach open that has been open for 9 months? Is that caused by lack of funds to hire a competent man there for this research?

Dr. Kaim. No; it is really due to the shortage of qualified professionals in psychiatry and neurology. We have the funds available. We are always recruiting and we are always short of our targets because of the shortage of personnel.

Senator Yarborough. Well, I am hopeful that the funds we have voted in the National Institutes of Health, while they create demands for medical doctors with these specialties for research, will not thereby add to the shortage. I am very hopeful that the medical education bill which came through our health subcommittee last year and has been signed into law, will be implemented this year to help fill some of these shortages.

We have under this term, "public welfare" been hearing education and veterans' affairs and manpower and public health in many related fields, where we see a need in one field spreading over into needs in another field, calling for the few trained personnel that we have in

this country.

Of course, the higher the skills required, the greater the shortages in this country. As we go downward in skills, we begin to get unemploved people. We find we do not have unemployed people at the top in these high skills and high degree of training. Over in the education field, we are trying to supply that.

Now, gentlemen, you see the problem here. The more detailed information we have in this subcommittee on that subject the more information we will be able to supply the full Labor and Public Wel-

fare Committee.

(The subcommittee subsequently received the following additional material:)

> PARALYZED VETERANS OF AMERICA, INC., Needham, Mass., June 3, 1964.

Memorandum to: U.S. Senate Subcommittee on Veterans' Affairs.

Subject: Spinal cord injury and disease research.

From: Paralyzed Veterans of America, William P. Green, research director.

1. (a) The statements given in opposition to H.R. 8677 by the Veterans' Adinistration that were directed to section 216(c), title 38, United States Code, regarding the source of the funds and their use, is giving a narrow interpretation to section 216.

The entire section is entitled "Research by Administrator." Section 216(a) sets up a requirement to carry on prosthetic research; section 216(b) gives permission to disseminate information gained from the research; section 216(c) au-

thorizes the continuity of funds to achieve the purposes of the section.

The interpretation given by VA limits the application to strictly prosthetics. The title "Research by Administrator" implies that there was intended a much broader purpose for this section of title 38, United States Code. To draw the narrow interpretation is to ignore the section title which is an integral part of the section and should be included in determining purpose.

Section 216(c) does not draw the line strictly to prosthetics as envisioned in 216(a), it goes to the entire section and, therefore, the purpose as expressed in

The amendment of section 216 to include \$100,000 to be used for spinal cord injury and disease research would refer to the broad subject of research by the Administrator and the existing funds for that purpose could be used rather than

limiting it to using prosthetic research funds.

(b) In the event that the more restrictive view of section 216 is adopted, then H.R. 8677 could be amended to place the responsibility of spinal cord injury and disease research directly as a duty of the VA Department of Medicine and Surgery under title 38, United States Code, section 4101, which includes research as a duty.

2. The interesting document of September 24, 1963, refers to estimates applicable to the 1962-63 fiscal period and to projects of the neurology and urology departments. The fact still remains that spinal cord injury and disease research projects are not being done by the spinal cord injury staff. The reason an estimate is used is that there are no projects labeled "Spinal Cord Injury Research."

On checking with California PVA, Mr. Alan Jarabin, president; Vaughan PVA, Mr. John Krenzel, president; and New England PVA, the estimates of re-

search in their centers was hotly disputed.

California PVA (Long Beach VA Hospital) has given \$16,800 toward the equipment of the spinal cord injury laboratory and has raised an estimated \$100,000 for this purpose from the Veterans' Assistance League and the Doris Duke Foundation and \$13,000 from National PVA

Vaughan PVA (Hines VA Hospital) reports that a project is being delayed

on electronic bladder control. They will probably donate \$2,000 for this purpose. New England PVA (West Roxbury VA Hospital) states that the colony of paraplegia dogs was used for antitoxin tests when the funds were no longer available for the original project. In June and July of 1963, two more dogs were developed; but there are no funds for an approved project, and the two remaining dogs are receiving simple maintenance. A project is also being pursued by the urology department which is considerably less expensive than the estimated \$75,000.

3. The Veterans' Administration survey as printed in 88th Congress, 1st session, House committee print No. 1, "Operations of Veterans' Administration Hospital and Medical Program" (February 1, 1963) gives a number of reasons for attracting and retaining personnel. In practically every hospital, it is considered that research and the attending facilities for it are essential. PVA is simply requesting that this same reasoning be applied to the spinal cord injury services in order that they may attract and retain staffs dedicated to the highest standards of treatment.

WILLIAM P. GREEN, Research Director.

Senator YARBOROUGH. The subcommittee has received the following statement and letters and I order them to be printed at this point in the record.

(The statement and letters follow:)

## STATEMENT OF CHARLES L. HUBER, NATIONAL DIRECTOR OF LEGISLATION, DISABLED AMERICAN VETERANS

Mr. Chairman and members of the committee, on behalf of the Disabled American Veterans I wish to express to you a genuine appreciation for the opportunity to present our views with respect to several bills now pending before your committee.

#### H.B. 8677

This bill proposes to amend title 38, United States Code, to set aside funds for Veterans' Administration research into spinal cord injuries and diseases.

It is a well-established fact that the VA hospital care program represents one of the most important benefits accorded our country's sick and needy veterans. The high quality of patient care is due, in large measure, to VA research and study programs in the field of prosthetic appliances, orthopedic appliances, and sensory devices. These programs have contributed significantly not only to the health of veterans but also to the general advancement of science.

H.R. 8677, provides that, for each fiscal year in the period beginning July 1, 1964, and ending June 30, 1970, the Administrator shall set aside not less than \$100,000 for the conduct of research into spinal cord injuries and diseases, and other disabilities that lead to paralysis of the lower extremities.

H.R. 8677 is a reasonable and responsible bill with a provision designed to effectively meet an urgent and most serious problem. It was introduced at the request of the Paralyzed Veterans of America, an organization which has steadfastly directed its efforts toward improvement of the care and treatment of patients who suffer injuries and diseases of the spinal cord. Through bitter experience its members have learned that paraplegics are among the most seriously handicapped people in the world. They see in the bill's enactment the fulfillment of their efforts to help bring about, by appropriate research, the eventual cure of paraplegia. Their task is a vast one and much remains to be done. The bill offers to the Veterans' Administration opportunity to play an important role in the achievement of this most worthy objective.

Mr. Chairman, we earnestly urge that you and the committee members give thoughtful consideration and approval to H.R. 8677.

#### H.R. 2636

This bill proposes to amend chapter 35 of title 38. United States Code, relating to educational assistance for war orphans to provide that the Administrator of Veterans' Affairs may afford special restorative training for an additional period of time when he finds such is necessary to overcome or lessen the effects of a physical or mental disability which handicaps the child in the pursuit of his educational program.

Under terms of the War Orphans' Educational Assistance Act, an eligible person is entitled to special restorative training for a period not to exceed 36 months (or the equivalent thereof in part-time training). H.R. 2636 would give the VA Administrator authority to extend this 36 months' period if he finds that additional assistance is necessary to accomplish the purpose of special restorative training.

The merits of this bill are perceived at once when it is recalled that the purpose of special restorative training is to assist an eligible child to overcome the handicap of a manifest physical or mental disability. In this connection, there are known instances where a child—because of the serious nature of his disability—is unable to reach a state of rehabilitation at the expiration of the prescribed 36 months' period of training. It appears entirely reasonable that this particular child should be made eligible to continue his training until such time as restoration is attained. To do otherwise would surely defeat the very purpose for which the restorative training program was established.

We respectfully petition the committee to give favorable consideration to this

legislative proposal.

#### H.R. 7751 AND H.R. 8611

Your committee also has before it for consideration H.R. 7751 and H.R. 8611. Our organization has no national convention mandates on the subjects covered in these legislative proposals. We therefore have no official position nor any comments to offer in these matters.

Again, in behalf of the Disabled American Veterans, I wish to thank you for the opportunity to express our views on the pending bills.

> AMVETS National Headquarters, Washington, D.C., May 28, 1964.

Hon. RALPH W. YARBOROUGH, Chairman, Subcommittee on Veterans' Affairs, Senate Office Building, Washington, D.C.

DEAR SENATOR YARBOROUGH: This is to advise you and the members of your subcommittee that AMVETS support and urges the passage of S. 2636, H.R. 8611, H.R. 8677, and H.R. 7751.

We would appreciate it very much if you would advise the members of your committee of our position.

Kindest regards, Sincerely yours,

Don Spagnolo, National Executive Director.

THE AMERICAN LEGION
REHABILITATION COMMISSION,
Washington, D.C., June 1, 1964.

Hon. Ralph Yarborough, Chairman, Subcommittee on Veterans' Affairs, Committee on Labor and Public Welfare, U.S. Senate, Washington, D.C.

DEAR SENATOR YARBOROUGH: The American Legion appreciates the opportunity to express its views on H.R. 7751, a bill which would "extend certain construction authority to the Administrator of Veterans' Affairs in order to provide adequate veterans hospital facilities in Los Angeles, Calif."

Resolution No. 158 (copy attached), adopted by our 1963 national convention, directs our organization to oppose any plan to declare surplus those lands owned and controlled by the Veterans' Administration, and to sell, lease, or otherwise dispose of them to any other agency, whether it be Federal, State, county, city, or private.

Although H.R. 7751 would not authorize the exchange or disposition of VA land, the bill would, in our opinion, facilitate the exchange of a portion of the land of the Veterans' Administration center in West Los Angeles for a portion of land owned by the city of Los Angeles. For this reason we feel we have a responsibility to make our position known.

The American Legion recognizes that there is an urgent need for a VA hospital in Los Angeles and we adhere to the principle that the Administrator of Veterans' Affairs should have sole authority to designate the site for the VA hospital construction. Under these circumstances, therefore, we cannot oppose enactment of H.R. 7751.

However, as is evidenced by the adoption of Resolution No. 156, 1963 national convention, the American Legion is opposed, as a matter of principle, to plans which would declare surplus land owned or controlled by the Veterans' Administration, and is opposed, as a matter of principle, to the use of VA hospital

construction funds for the construction of military facilities, whenever such transactions are adverse to the best interests of veterans and the Veterans' Administration.

Very truly yours,

JOHN J. CORCOBAN, Director.

FORTY-FIFTH ANNUAL NATIONAL CONVENTION OF THE AMERICAN LEGION, MIAMI BEACH, FLA., SEPTEMBER 10-12, 1963

Resolution No. 156 (California),

Committee: Rehabilitation.

Subject: Oppose disposition by Federal Government of land comprising the site of VA hospitals, domiciles, or centers.

Whereas many Veterans' Administration facilities are located on large tracts of land obtained either through purchase or by land grant deeds; and

Whereas at the time of acquisition, these lands were to be used for providing

hospital or domiciliary facilities for veterans; and

Whereas the American Legion is aware of efforts by other Federal agencies, as well as of city, county, and State officials, to obtain portions of these lands and to utilize them for other purposes; and

Whereas it is the conviction of the American Legion that lands comprising these hospitals, domiciliaries, and centers should be maintained by the Federal Government for the exclusive use of providing for the care of and to furnish service for war veterans: Now, therefore, be it

Resolved, by the American Legion in national convention assembled in Miami Beach, Fla., September 10-12, 1963, That the American Legion shall continue to make known its vigorous opposition to any plan to declare surplus those lands owned and controlled by the Veterans' Administration, and to sell, lease, or otherwise dispose of them to any other agency, whether it be Federal, State. county, city, or private.

Senator Yarborough. I want to thank each of you and all of you for the careful attention you have given this subject and the information you have given to this subcommittee.

This hearing is adjourned. We close the record on these four bills but will have the record held open for another week for supplementary material on any of them and particularly this earmarked funds bill.

Thank you very much.

(Whereupon, at 11:35 a.m., the subcommittee adjourned, subject to the call of the Chair.)

#### APPENDIX

(Excerpt from Clinical Neurosurgery, vol. 8, "Proceedings of the Congress of Neurological Surgeons, Chicago, Ill., 1960," Williams & Wilkins Co., 1962)

#### CHAPTER XV

# Experimental Observations upon Axonal Regeneration in the Transected Spinal Cord of Mammals\*

L. W. FREEMAN, M.D., Ph.D.

During this survey of experimental work, carried out at Yale University and Indiana University over the past 12 years, allusion will be made to work which has already been published in whole or in part, as well as to work which has not as yet been published. Some of the effect brought out by motion pictures will be lost in the written text, but an attempt will be made to present suitable illustrations covering this material.

Historically, there was a time when the belief was commonly held that a severed peripheral nerve followed a pattern of frustration which failed to result in restoration of its initial function. Although it is generally held that proper reapproximation of severed ends of peripheral nerves will result in restoration of function, this belief is true only in a partial sense. There remains a large group of animals and patients in which precise surgical techniques have failed to provide expected restoration of function. Consequently, there remains a considerable amount of work necessary to provide a more adequate therapy for peripheral nerve lesions. Many of the factors are probably fairly well known, but methods of overcoming these difficulties apparently are not known. Certainly it is true that there is an apparently relentless effort on the part of severed axons of peripheral nerves to regrow, even though these efforts are frequently abortive.

One must be reminded that Ramón y Cajal (17) was awarded his Nobel Prize for his work on regeneration and degeneration in the central nervous system. Much of his writing was not available to most of the interested people and suffered considerably in translation. As a result of this, the general interpretation has been given that, although axonal regeneration indeed does occur in the central nervous system, it is abortive and fails to accomplish any end results. If one examines his writings carefully, and looks at his explanations and declarations of frustration, one comes to a rather clear conclusion. Like much of the human material which has been examined, his animals had one common feature—they all died or were in the process of dying. His writings do not provide enough detail of the surgi-

• This work has been made possible in part by grants-in-aid from the Veterans Administration, National Paraplegia Foundation, United States Public Health Service, and the John Hartford Foundation.



cal methods, but one gets the impression that the surgery was not even alean and that the care of the animals left much to be desired. The remarkable feature of his work is that he was able to demonstrate regeneration at all in these animals. The fact remains that he did demonstrate regrowth of axons in spinal neurons. There were moderate attempts at checking the observations of Cajal, notably those of Nicholas and Hooker (16) and Sugar and Gerard (19), but it seemed apparent that the mind of the average scientist and medical man was made up to the fact that if regeneration of spinal axons did occur, it was abortive and therefore could not possibly result in any degree of functional return.

This presentation will outline experimental observations conducted since the first accidental observation of a walking spinal rat in a group of animals which had been prepared for study of calcium metabolism in paralyzed animals. The general sections will constitute observations on simple transections of the spinal cord, observations upon efforts to alter the reactions at the site of the transection, and attempts to bypass lesions through which functional regrowth could not be expected.

#### SPINAL CORD TRANSECTION

The initial observations were made upon rats with laminectomies of several vertebrae, the spinal cord being lifted free with its investing membranes and sectioned with a scissors. This resulted in three transections (Fig. 97), one each at the two laminar edges and one inflicted by the scissors, and it was from this group that the first walking spinal animal was obtained. Subsequently, several additional animals with good walking were obtained from the extension of the series (9). Once this had been observed, the transections were conducted through a single laminectomy or, as was true in later series, without laminectomy at all, but through the ligamentum flavum. Properly cared for, a great number of these animals will demonstrate walking ability in an average of 75 days following operation (Fig. 98) (4). Many do walk again and gain apparent control over bladder and bowel function. They show growth of axons between the divided ends of the spinal cord, as seen in Figure 99. Subjected to neurophysiological recording methods, they show conduction past the site of transection, which is abolished by repeat chemical or surgical transection (Fig. 100). Analysis of the failures—excluding those animals dying of surgical complications or intercurrent infections-indicates that the principal deterrent to functional regrowth of axons is distance between the divided ends, for this area is almost always completely replaced by connective tissue scar (Fig. 101) or by cyst formation. This distance is most appreciable in adult animals, since the cord is under the most tension at that stage, and, consequently, the completely divided cord separates further in such animals.

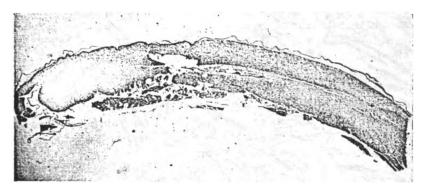


Fig. 97. Microscopic longitudinal section of distal stump of recently transected spinal cord of rat, showing the extensive damage invoked by the method. In addition to the complete section at the left, there is another almost complete section where the cord was pulled against the laminar edge.

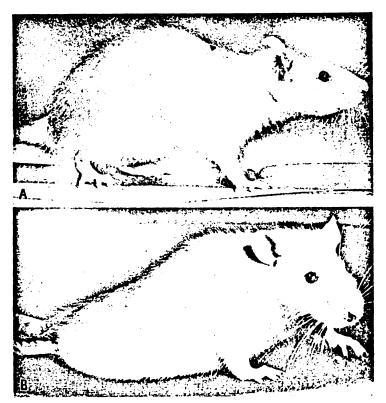


Fig. 98. A, Normal rat; B, rat with paraplegia following acute cord transection. Some of these animals show return sufficient to make them indistinguishable from the animal in A.

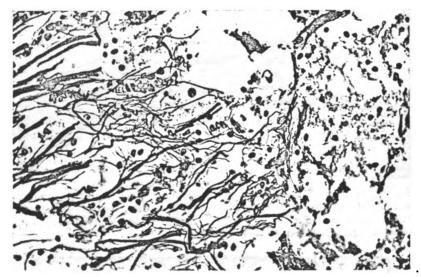


Fig. 99. High power view of longitudinal section of rat spinal cord (silver stain) at the site of transection. Axons in profusion are seen growing through the area.



Fig. 100. Action potentials from the spinal cord of a rat which reached slight non-useful function 10 months after cord transection. Fine bipolar electrodes placed 1 cm. above and below site of transection. Stimulus of 1.75 volts for 100 milliseconds, response magnified to produce 1-cm. deflection for each 50 millivolts. A, Stimulus above and pick-up below; B, stimulus below and pick-up above; C, same after repeat cord section.

The general health of adult animals is more difficult to maintain and survival is, therefore, less. During periods of extremely rapid growth this distance can also become rather large and is often augmented by a severe degree of kyphosis (Fig. 102), which serves to further separate the divided ends.

In cats, transection of the spinal cord is followed by the development of reflex stepping patterns which can be confused with walking patterns. Indeed, Shurrager and Dykman (18) have demonstrated the development of conditioned reflexes of a nature sufficient to be convincing of walking patterns. Because of this propensity, cats were not used extensively, but

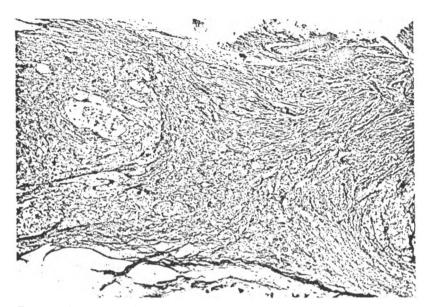


Fig. 101. Silver-stained low power magnification of longitudinal section of rat cord through the area of transection. The entire central area is lined with connective tissue elements and effectively bars the growth of axons seen in the right lower portion of the illustration as well as in the central left portion.

Figure 103 shows the growth of axons past a transection site in such an animal.

In dogs, the surgical techniques could be more refined, but it took a number of years to train a group of personnel who could maintain these animals in good health. Meantime, based upon certain common observations of the methods of care of young puppies, transecting lesions were placed in 5-day-old dogs. In these animals the bitch expresses both the bladder and the bowel by some instinctive drive which mostly results in ultimate good automatic bowel and bladder evacuation. From such animals, a number of extremely good walking animals have evolved, the principal example being the dog called "Stinky" (Fig. 104). Since the development of techniques for good postoperative care for adult animals, however, a fairly large number of walking spinal dogs have been developed (Fig. 105). The dogs with walking patterns show regrowth of axons through the area of section (Fig. 106). Histologically, the fibers traversing the site of transection are both myelinated and unmyelinated. The majority are small fibers: without myelin and show much branching. They also show, by neurophysiological methods, conduction of stimuli past this area, which can be abolished by retransection (Fig. 107). Conduction rates are generally slow, conforming to the histological studies.

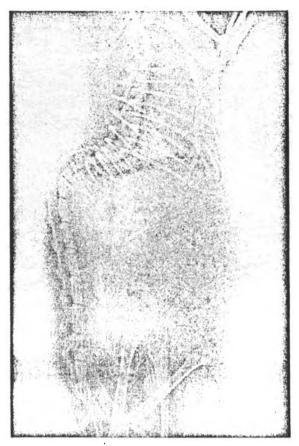


Fig. 102. Severe kyphosis which develops in rats after laminectomy and spinal cord transection, resulting in distraction of the divided ends. Incidental note is made of two large calculi in the bladder.

In monkeys, similar lesions have been placed, but success in the postoperative care has been uniformly poor. There are a number of contributing
factors. Not the least of these is self-cannibalism on the part of the animal,
so that the parts are soon destroyed. Likewise, their tremendous activity
usually results in dislocations of joints and fractures of bones, with subsequent self-cannibalism. The difficulty in capturing such animals is also
great; in the only two animals that were apparently showing some return
of function following transection, these traces disappeared after capture
and upon exploration of the area of transection were seen to have acute
lesions subsequent to handling. In hemisecting lesions, axonal regrowth
has been seen (Fig. 108).



Fig. 103. Silver-stained high power view of a longitudinal section of the spinal cord of a cat which demonstrated apparent voluntary function of a remarkable degree. The section is taken through the area of surgical transection.

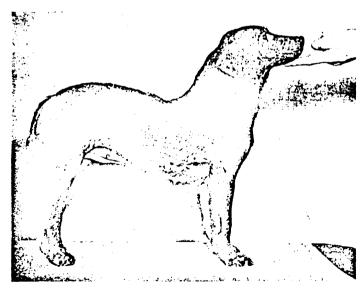


Fig. 104. This dog ("Stinky") was operated upon at 5 days of age with open transection of the spinal cord. The cord ends remained in close apposition and had to be lifted to determine that the transection was complete. She survived through several pregnancies and a repeat laminectomy. Chemical transection (injection of procaine directly into the spinal cord) reproduced paraplegia with preservation of reflex activity of the hind limbs, with full recovery after the local anesthetic wore off. The area of laminectomy and cord transection is quite obvious.

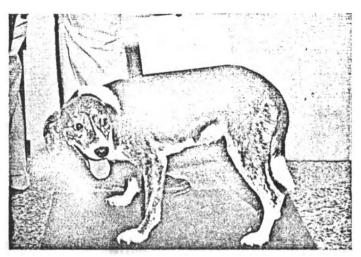


Fig. 105. Adult dog subjected to partial laminectomy and transection of the spinal cord. The stance is deceptively normal in appearance, for the animal showed obvious neurological deficits. Complete paraplegia was present for many months before any degree of voluntary motion appeared, but the animal could walk very acceptably most of the time. Conduction studies indicated good electrical transmission, and histological sections showed many axons traversing the site of transection.

#### EFFORTS TO INFLUENCE SCAR

There would be two distinct approaches to solving the problem of the gap between the divided ends of the spinal cord. The most obvious would be to reapproximate the divided ends. This is not any easy procedure, since transection results in destruction of up to 1 cm. of tissue even with presumably nice sharp sections. Vertebral bodies have been removed so that the divided ends could be reapproximated, however, and several of these foreshortened animals have ultimately shown ability to utilize the hind extremities (Fig. 109) (8). This, however, is a rather drastic surgical procedure and could hardly be visualized as a method of therapy, although several foreign surgeons have utilized this technique in the treatment of human patients.

The other design would be to attempt a change in the scarring pattern at the site of section. Many substances, such as nerve grafts, arachnoid, plasma clot, and porous materials, were placed between the divided ends. Uniform results were obtained—an impassable barrier of connective tissue scar. One of the early efforts at measuring the potential of chemical agents to alter the pattern of scarring at the site of section was that in which the spinal cord was hemisected to prevent retraction of the divided ends. Control fluids or experimental fluids were delivered directly to the site of trauma



Fig. 106. High power view of longitudinal section of the spinal cord of dog ("Stinky") through the area of transection, stained to reveal nerve fibers. There is a remarkable profusion of fibers penetrating the area of transection.

(Fig. 110). In general, these generous hemisections result in a final complete paraplegia in the animal. Under the influence of trypsin, delivered to the area of trauma, there is a remarkable inhibition of the connective tissue scarring response (Fig. 111), with a consequent profuse growth of axons (Fig. 112) and an ultimate functional recovery which often cannot be distinguished from normal activity (10). Subsequent investigations indi-

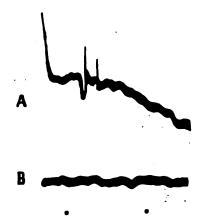


Fig. 107. Conduction study in animal showing walking ability long after spinal cord transection. Electrodes for stimulation are placed in the cord above the transection and bipolar pick-up electrodes are placed in cord below the transection. The time base is 100 cycles per second and the stimulus is 1.5 volts of 2 milliseconds' duration. A, Stimulation is followed by potentials; B, stimulation following repeat surgical transection shows no response.

cated that the trypsin could be injected intramuscularly or intravenously and result in the same response (21). This is especially remarkable in other animals and is perhaps most marked in the cow, where intravenous injections are well tolerated and where the favorable influence upon scarring is considerable. The influence of small dosage roentgen ray therapy was examined and found to be favorable at low levels (22). Similarly, an antihistaminic drug has been checked out in a preliminary fashion and demonstrates a similar effect (8). Likewise, there is a precise dosage level at which a pyrogenic agent appears to exert a favorable influence (14, 11). Other materials, such as anticoagulants or products of the adrenal cortex, failed to demonstrate similar responses (8). Perhaps the primary consideration that arises out of these observations centers around the fact that if so many different types of influences (physical and chemical) can alter the scarring reaction at the site of the lesion, they must act through some common system as yet unknown.

#### BYPASS TECHNIQUES

One of the major questions raised during presentations of the material on regrowth of spinal axons after transecting lesions has been connected with the exact origin of these axons. From the extensive material, it is quite obvious that many times these cell bodies lie in the traditional internuncial zones, but at times it is quite apparent that these arise from the

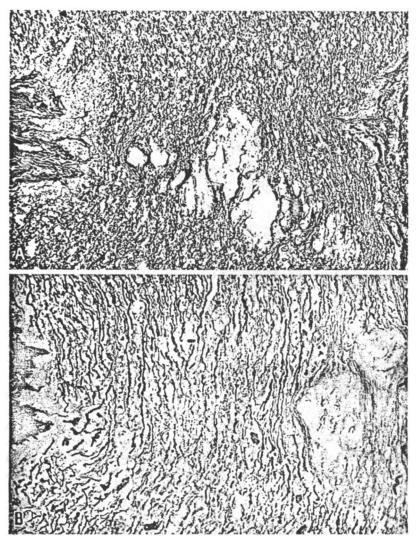


Fig. 108. Longitudinal section of monkey (*Macaca rhesus*) spinal cord through area of hemisection. A, The path of the knife is marked by the crests of connective tissue on both sides with cavitation of the area between (trichrome). B, High power view of next section (silver stain) to show axons traversing this area.

horn cell areas, both posterior and anterior. The question raised, then, involves whether or not these might represent intra- or extraspinal section of nerve roots which have subsequently regrown into the distal substance of the divided cord (15). Since the material showed that this was undoubt-

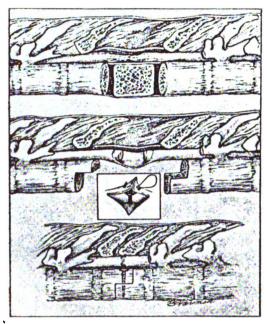


Fig. 109. Method of resecting scarred spinal cord and bringing fresh ends together. This procedure is carried out from a single posterior approach but would have limited usefulness.

edly true at times, it was obvious that the next step would be to utilize nerve roots and/or peripheral nerves as implants to bypass transecting lesions of the spinal cord. There appeared to be a pattern of rejection of these implants and one has the impression that Clark (1) had eliminated the potential of such growth. However, he apparently eliminated the potential of growth of central nervous system axons into such implants, but his illustrations demonstrate quite clearly that the implants themselves, if viable, would grow into the substance of the central nervous system. When successful implants were placed—and it appeared to be merely a physical matter—then various events followed. Perhaps the most pertinent early observation is that such implanted nerves markedly influence the pattern of reflexes in chronic spinal preparations. In the early days, usually about 10, there is an exaggeration of the reflex pattern which is then followed by a marked suppression (12). This is apparently due to an exudation of materials associated with neuronal activity. This observation has been so impressive that similar operations have been carried out upon human beings with the result that suppression of unwanted withdrawal reflexes has been almost uniform (7). Following this period when the reflex activity appears

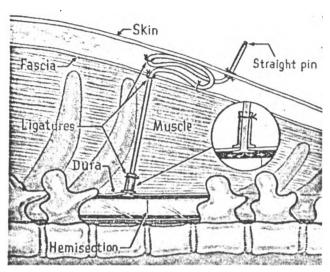


Fig. 110. Diagram of method used to investigate the action of the enzyme trypsin upon healing events after surgical hemisection of the spinal cord of the dog. The plastic tube communicates with the subarachnoid space and allows periodic introduction of the test substances.

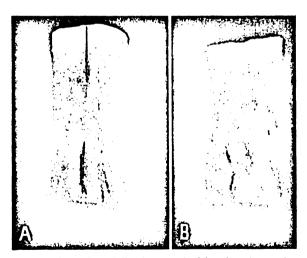


Fig. 111. Spinal cords of dogs following surgical hemisection and regional installation of test material (see Fig. 110). A, Modified trypsin; B, control fluid. Note the great amount of scarring in the control and the comparative lack of it in the trypsintreated animal.

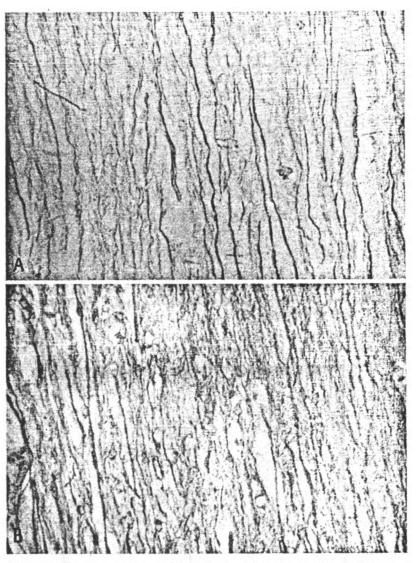


Fig. 112. High power views of longitudinal sections of spinal cord of surgically bemisected dog stained for neural elements. The animal was treated with trypsin for several weeks and was sacrificed 189 days after operation. A, The uncut side; B, the hemisected area showing numerous axons bridging the area.

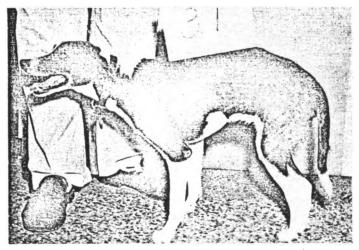


Fig. 113. Adult animal with spinal cord transection and implants of intercostal nerves. Walking ability was moderately good.

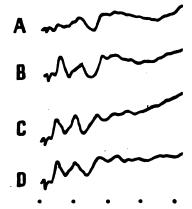


Fig. 114. Electrical recording from electrodes placed in the spinal cord distal to site of previous transection and nerve implant. Stimuli are applied to electrodes situated above the site of transection. Appropriate magnification is used. Time base, 100 cycles per second; stimulus duration, 2 milliseconds. A, 5 volts; B, 6 volts; C, 7 volts; D, 8 volts. Note the appearance of different groups of conducting fibers.

to be normal and during which reflex evacuation is easily obtained and maintained, there is a protracted period after which degrees of functional activity begin to appear in hind extremities (15, 20). This activity can become great enough that acceptable walking function is observed (Fig. 113). This walking function can be reconverted to complete paraplegia by section of the nerve implant. Conduction studies carried out upon such implants

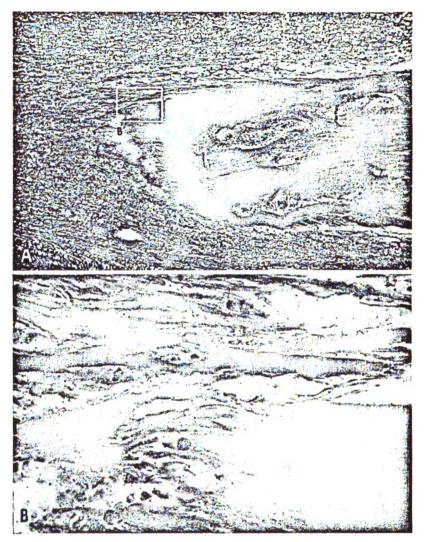


Fig. 115. Microscopic views of longitudinal sections of spinal cord of dog with nerve implant (silver stain). A, Shows the nerve growing well in the surrounding spinal cord; B, a higher power detail of the penetration of axons from the nerve into the cord.

demonstrate adequate conduction—which is abolished by section of the nerve (Fig. 114). Microscopic analysis of the areas shows ample growth of these fibers into the distal stump (Fig. 115). Anatomical growth and function have also been observed in humans (Fig. 116) (8, 2).

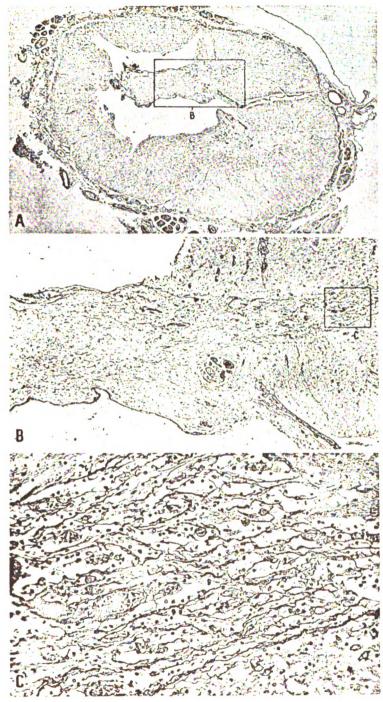


Fig. 116

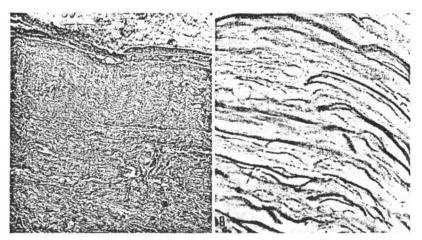


Fig. 117. Low (A) and high power (B) views of silver-stained longitudinal sections of the site of anastomosis of a human intercostal nerve to sacral nerve roots. Profuse growth of axons is seen.

## PERIPHERAL OR SPINAL NERVE SWITCHES

In the male guinea baboon it has been demonstrated that erectile penile function is subserved by the 3rd sacral nerve root. This is abolished by section of this nerve, but can be restored by anastomosis with another nerve root, such as L4 (5) (Figs. 118–120). In man, anatomical growth has been observed (Fig. 117). In the monkey, plasma clot suture of spinal nerve roots is almost uniformly successful, especially with autologous clot (Fig. 121). These axons grow vigorously and restore function adequately. Such sutures can result in favorable function even though the proximal root is from the opposite side. To augment these observations, phrenico-facial and other foreign nerve switches have been conducted in both cats and monkeys with adequate restoration of distal function. In the dog the spinal nerve roots can be sectioned and resutured, with restoration of function (6). Likewise, the sciatic nerves can be switched from one side to the other with ultimate restoration of favorable function.

## OBSERVATIONS UPON CONCUSSION

In an effort to study the factors involved in the ordinary injury to the spinal cord, concussive injuries were directed to the exposed spinal cord.

Fig. 116. Microscopic views of human spinal cord. Intercostal nerves were implanted into the conus medullaris. In A, the nerve is seen within a traumatic cyst blending into the substance of the cord. In B, greater magnification shows more detail of this process. C, High power view to show the axons growing into the substance of the cord.



100:

Fig. 118. Gross views of nerve root crosses in the male guinea baboon. A and B are the same preparation with the roots stained to show their course and origin. C is a different preparation. The site of anastomosis with autologous plasma clot is usually quite smooth.

It was possible to delineate a marginal point beyond which paraplegia was virtually inevitable and below which paraplegia was variable in both the rat and the dog. It has been demonstrated that decompression of such lesions can be obtained only by section of all investing membranes, including the pia mater, and gentle debridement—usually with a saline streamdirected at the site of major trauma (13) (Fig. 122). Efforts have been directed toward determining the time factor in this element, and at the

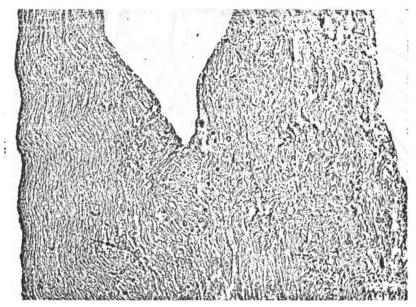


Fig. 119. Microscopic view of silver-stained longitudinal section through the point of anastomosis of the lumbar nerve root to sacral nerve roots seen in Figure 118, A and B. The axons have grown well into the distal stumps.



Fig. 120. The penis of the guinea baboon has regained its erectile ability in this animal 8 months after section of the 2nd and 3rd sacral anterior nerve roots bilaterally and anastomosis of the proximal ends of the 4th lumbar anterior nerve roots.

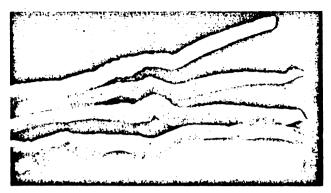


Fig. 121. Gross view of site of anastomoses of spinal nerve roots of rhesus monkey. Autologous plasma clot gives excellent approximation.

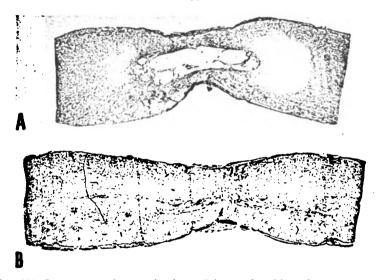


Fig. 122. Low power microscopic views of dog cords subjected to same amount of direct trauma. A, The cord of an animal in which the lamina was replaced. The animal was paraplegic. B, The cord of an animal in which the lamina was not replaced, the pia mater was incised medially, and the necrotic debris was washed out. This animal showed almost no neurological impairment.

present moment it can only be stated that probably the most favorable time is that prior to the full development of edema which occludes capillary circulation and induces further permanent damage to the cord tissue at the site of trauma (3).

Other efforts have been extended in these areas but have generally not shown sufficient promise to warrant pursuit by our small crew.

#### SUMMARY

Illustrative material is presented to indicate that axons originating within the spinal cord, and even those which under ordinary circumstances find their way out of the spinal cord, can and will reach the distal divided stump to restore function. The principal area of concern at the present time is not whether this obvious result can be obtained—but why it is so infrequent in the human being.

#### ACKNOWLEDGMENTS

Calvin C. Turbes has collaborated on a good part of this work. Since the success of the experiments depended on the care of the animals, special thanks must be given to Arthur Redford, Mildred Redford, Rufus Stanfield, and a series of medical students who did the night and weekend care. The staff of James F. Glore ably prepared the medical illustrations. Many research fellows have rendered invaluable assistance.

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# Questions and Answers

QUESTION: What is your opinion about the opening of cystic degenerated areas in spinal cords, both acutely and chronically?

DR. FREEMAN: Our position is based upon our findings in animals, which have been published, and upon observations in humans. It is necessary to open the pia mater over the entire area of trauma, to bluntly incise to the area of major damage, and then to gently evacuate all necrotic debris and blood with a stream of saline. We have followed the policy of opening these immediately, as well as late, without increase in disability and often with very gratifying improvement in function.

QUESTION: Do they develop decubitus ulcers?

DR. FREEMAN: They certainly do. If paraplegic animals are handled in the ordinary way, decubitus ulcers are inevitable. As I pointed out in the formal report, it took a number of years before we could develop a crew of people capable of handling these animals. Our present method involves keeping the animals on sawdust floors. No moisture is used in cleaning, except for a weekly mopping. The animals are free to roam around and each is handled daily, with paralyzed joints being put through full ranges of motion. In the past few years, covering perhaps 500 or 600 dogs, we have had only one or two cases of decubiti. The bladders and bowels of these animals are as paralyzed as their counterpart (the human), and they have to be evacuated periodically day and night until they become automatic.

QUESTION: What is the effect of retransection of the spinal cord in animals which have had nerve transplants?

DR. FREEMAN: If the transection is carried out above the site of origin of the transplanted intercostal nerve, or below its point of insertion, complete paraplegia again results. Retransection through the original site of transection has not altered the course of the functional development. Section of the nerve similarly renders the animal paraplegic.

QUESTION: How do you fix the distal end of the nerve into the spinal cord in your experimental paraplegic animals?

DR. FREEMAN: The anastomoses are done primarily with plasma clot sutures. We use autologous plasma and bovine thrombin in some. In others, we use a loose sling suture to the dura mater well back on the nerve so that we have an ample distal stump to insert into the substance of the cord.

QUESTION: Did any of the dogs with nerve transplants following spinal cord section show any return of sensorium below the lesion?

DR. FREEMAN: It is a little hard to tell in many of the animals. We use distal stimulation and get proximal transmission beyond the point where these nerves should have synapsed, so that we feel that some of the responses to pinprick and pinching represent actual sensory conduction.

QUESTION: Which drug is more helpful in regeneration, trypsin or hydrocortisone? How does it work?

DR. FREEMAN: As was pointed out in the formal delivery, the major problem confronted by regenerating axons is a dense connective tissue barrier which develops at the site of the lesion. The various graft substitutes that we have used have produced excellent connective tissue scar through which no axons could grow. Our experience with cortisone has not been favorable in the dosage levels that we employed. However, trypsin is very effective in minimizing this connective tissue barrier when administered in the manner demonstrated in the formal presentation. It also works just as well when administered intramuscularly, as well as intravenously. In the cow and the sheep, this effect is extremely dramatic. Since low dosage x-ray therapy also works, as does an antihistamine compound, we have been led to the conclusion that the influence must be exerted upon some ground substance, about which we know nothing.

QUESTION: Would you comment on the question of early approach to myelomeningocele?

DR. FREEMAN: We have followed a policy of operating upon all of these patients as an emergency, in order to close over the cuff of the myelomeningocele without fear of infecting the spinal canal. I think that all of the house staff have been gratified to see patients upon whom they have operated return in subsequent years as quite normal looking children who had been quite paraplegic at time of operation. I believe that some of these patients obviously have increase in function over and above that which is preserved. This is in accord with the mechanisms brought out by Dr.

Campbell. In some of the patients, there is an apparent absence of tissue between the proximal and distal ends and plasma clot suture techniques might profitably be used.

QUESTION: At what level were the sections of the spinal cord done in dog? Dr. Freeman: Almost all of the animals were done at the thoracic 8th or 9th dermatome levels. This is the easiest level at which to do a laminectomy in a dog or a rat and is high enough to insure paralysis of the hind quarters. Below this level the vertebrae are of a lumbar type, in that they have dorsal spines which are directed straight upward and laminar arches which are either flat or recurved.

QUESTION: Do you do an immediate laminectomy on all cases of spinal cord injury, assuming that the general condition of the patient permits?

DR. FREEMAN: We do. I think that if we were in private practice we might modify this approach somewhat. My inclinations at this moment are roughly as follows: 1) the patient does better, in general, if he has a laminectomy immediately; 2) his general health can be maintained in better fashion; 3) automaticity of the bladder is certainly no more difficult to establish; and 4) as long as the question of mortality does not enter into the problem and as long as there is no increase in disability as a result of the operation, it is difficult to speak of contraindications. Comparison of patients treated surgically in the Korean War versus the general manner in which they were handled in World War II shows a remarkable increase in the number who had return of function. The factors which Dr. Schneider speaks of have not loomed large in our experience. I do not know that laminectomy is the solution to the problem of spinal cord trauma. Certainly, there is a vast number of patients in whom the spinal cord is so traumatized that there is no reason to believe that functional return could be expected. With our approach, there is no means by which one can evaluate the potential for functional return without laminectomy. We have done this purposely, since our experimental data indicated that the surgical approach should be made before edema actually becomes fully developed and stops capillary blood flow, which would result in death of intact neural fibers through anoxia. Once this early stage has been passed and the spinal cord has adapted itself to the existing circumstances in regard to circulation, the emergency status has passed and surgery can be conducted at any time. Being an educational institution, we have the policy to operate upon all of these cases as acute emergencies in the hope that we can determine the best approach that should be recommended to the surgeon in practice.

QUESTION: Have you seen a traumatic myelopathy with complete motor and sensory paralysis on admission recover following surgery?

DR. FREEMAN: Just to give you an example: I remember a boy with two transverse lesions; one was at T3 and the other one was at C6. We did the

cervical lesion first. This was one of the cases where a considerable number of neurological examinations were done prior to surgery, since we operate upon these cases so acutely. Following the initial cervical laminectomy the motor and sensory level fell through the 3rd thoracic dermatome. Several days later we operated upon the thoracic lesion and today this man walks about perfectly normally. We are certain that he was complete in both the motor and sensory spheres at the cervical level for at least 12 to 14 hours and, subsequently, for a longer period of time at the upper thoracic level, and went on to full recovery. As I pointed out previously, our examinations are followed by immediate surgery and do not allow for multiple examinations which might exclude some of our supposedly complete cases who subsequently recover. One might wonder whether—if one insists upon strict academic fulfillment of completeness of lesion by periodic neurological examinations—laminectomy should ever be done.

DR. Bucy: You know that I am very proud of all of the residents who have trained with me—including Bill Freeman—but this is one of the things of which I have never been able to cure him. Nevertheless, it is only fair to say that of the various people who are trying to do something about the tragic situation which now exists in the matter of spinal cord injuries, Bill Freeman is in the forefront. Under these circumstances it is excusable for him to operate upon any or all of these people. I anticipate that his investigations—his operations upon people and upon experimental animals—will bring knowledge and understanding to this situation and a far more hopeful outlook.





