The report of the Committee on Dental Education was called for. This Committee asked for further time, which was granted.

WESTON A PRICE, Ohio, Chairman, read the report of the Committee on Scientific Research.

The report is as follows:

REPORT TO THE HOUSE OF DELEGATES OF THE NATIONAL DENTAL ASSOCIATION FROM THE PRESIDENT OF THE RESEARCH INSTI-TUTE AND CHAIRMAN OF THE RESEARCH COMMISSION.

October 23, 1917.

The activities of this department for the past year have included the following:

General Administrativo, including the financing of the various researches.

Researches under grants.

Researches io the Institute Headquarters. General Organization and Special Duties.

#### I. RESEARCHUS

Under Grants have been conducted as follows:

"The Relation of Month Infections to Systemic Infections," noder the direction of Thomas B. Hartzell, in the University of Minnesota, Mione-

"The Peridental Membrane," under the direction of Dr. Frederick B. Noyes, in the University of Chicago, Chicago, Ill.

"Studies on the Saliya and on Dental Caries," nnder the direction of Dr. Russell W. Binting, in the University of Michigan, Ann Arbor, Michigan.

"Dental Cemeuls," under the direction of Dr. Marcus L. Ward, in the University of Michigan, Ann Arbor, Michigan.

"Sallwary Deposits," under the direction of Dr. Percy R. Howe, in the Forsyth Dental Infirmary, Boston, Mass.

"The Relation of the Glands of Internal Scoretions to Deutal Problems, under the direction of Dr. Win. J. Gies, in the Columbia University, New York City.

"Root Canal Fillings," under the direction of Dr. John R. Callahan, in the Cincinnati General Hospital, Cincinnati, O.

"Mottled Enginel and Brown Stain Deformitles," under the direction of Dr. Frederick S. McKay, Colorado Springs, Colo.

"Quantitative Determinations of Certain Organic Substances in Saliva and Their Relation to Oral Conditions," under the direction of Dr. John A. Marshall, in the University of California, Berkeley, California.

# In Institute Headquarters.

"Dental Focal Infections. Their Cause, Effect, Elimination and Provention." Research Institute of the National Dental Association, Cleveland, Obio. By the Staff in the Institute Bullding, Cleveland,

- (a) Special Oral Infection Studies.
- (b) The Principles Underlying Ionic or Galvanic Medication.
- (c) The Relative and Actual Efficiency of Various Medicaments for Sterilizing Dentin and Cementum.

Detailed reports made at this moeting.

# II. GENERAL CORRESPONDENCE.

This has required from two to four hours a day. It jucludes:

- (a) Department Correspondence.
- (b) Answering inquiries on scientific topics pertaining to deutls!ry.
  - (c) The collection of pledges.

III. THE ORGANIZATION OF VARIOUS STATE SOCIETIES to provide a permanent support for the Research Department. The result has been that approximately three-fourths of the membership of the National is now on that basis. We have made twenty-six lecture trips during the past year, assisting in the programs of dental and medical associations. (Since the beginning of the organization of this Research Dopartment five years ago we have made 119 trips, at which 109 illustrated lectures have been given and over 100 conferences held. A total absence from the city of 350 working days.)

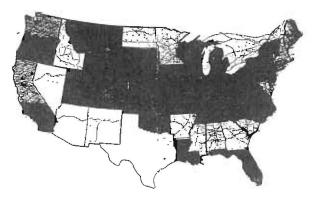
At this time nearly all of the large state societies bave provided in their constitutions for the support of the Research Department. This support includes the following states:

oraco rao romanag barren
Sonthern California440
Colorado295
Illinols
Indiana 973
Iowa900
Kansas440
Kentucky354
Louisiana123
Michigan
New Jersey569
Missonri804
Montana114
Nebraska411
New York
North Carolina291
Ohio
Oklahowa294
Oregon184
Pennsylvania1443
South Dakota175
Tennessee
Utah116
Vermont 85
West Virginia182
Wisconsin695
Wyoming 49
Virginia193
Total\$14,896

These figures are taken from the report of the Secretary of the National Dental Association to the House of Delegates.

Washington and California states voted fifty cents per member for each The Journal and the Research Department (Cal. June 1916) before the National Association increased the dues one

manent basis. In addition to this the organization of the department provides that each deutist by paying one dollar per year is paying the interest on \$20.00 of endowment principal. The present income from the profession on this basis is equivalent to an endowment of approximately \$300,000. As soon as the development of the work was con-



Map showing states that have adopted the one dollar increase in dues for the support of the Research Department.

dollar for The Journal. We have not as yet received these amounts.

California (50 cents per member)......679 Washington (50 cents per member)......451

# IV. COUNCIL OF NATIONAL DEFENSE

This consists in assisting in the work of the Committee on Dentistry, General Medical Board, Council of National Defense, and directing the world of the Sub-Committee on Research. We can report the following progress in this activity: Dr. Arthur T. Henriel has been assigned by the Surgeon General to the work of this sub-committee of the Committee on Dentistry for the particular study of Trench Mouth. He has been doing preparatory work in the libraries and will go to France to vigorously carry on this activity. It is the purpose of the Research Department to render as great assistance, financially and otherwise, as possible for the study of war problems. The Chairman has made a trip to Hallfax, Quebec, Valcatier and Toronto to study the conditions, opportunities and problems from the standpoint of the returned soldiers. He has also made six trips to Washington. There has been no expense to the Research Department or to government for these activities.

# V. ORGANIZING FOR THE ENDOWMENT OF THE INSTITUTE.

The plan of organization of this Research Department was cootinually included an adequate endowment and the various details have been developed to that end. This plan will, when consummated, establish the work on an adequate and permated.

sidered sufficiently well organized, a formal application was made in October of last year to the Carnegie Corporation of New York for financial assistance. That corporation, accordingly, made au official investigation and examination of the work and equipment of the Institute and requested to know if it would be possible for us to have a working relationship with the Medical Department of Western Reserve University for the helpfulness it would be to the scientific workers in the Institute. This working relation, they stated, would not require any organic connection. A meeting of the Trustees of the Institute, the Trustees of the National Deutal Association and the members of the Research Commission was ealled last March to meet in the Institute for the purpose of deciding the relationship not only with that university but with others, and, accordingly, a committee was appointed from the Institute to confer with un!versity officials. The University Trustees appointed a committee but before it was able to take up the matter some of its members were sent abroad on a special war commission. We have recently been advised by the President of the University that the matter will be taken up whoo the members of the committee return from Europe. We helleve a large endowment can ultimately be secured.

# VI METALLURGY.

This consists in the supplying of specially prepared tuogsten and molybdenum to the dental profession at cost. To date we have supplied these metala to the amount of \$3,832.84. VII. Clerical, SECRETARIAL AND BOOKKEEP-ING DEPARTMENT.

This has required the services of one Secretary all of the time and an assistant part of the time. The Institute has approximately three thousand accounts and there is a great deal of detail in the handling of these.

VIII. THE PUBLISHING OF THE RESEARCH REPORTS MONTHLY IN THE JOURNAL OF THE NATIONAL DENTAL ASSOCIATION.

This has required that each research report be sent to a member of the Advisory Board to be censored before publishing. We are indebted to the members of that Board for their painstaking and valuable assistance in this work.

#### IX. SCIENTIFIC DIRECTOR.

In addition to the personal responsibility for the above activities, the Acting Managing Director has had the detailed responsibility of directing the scientifie investigations in the headquarters. This position was accepted under pressure and after protest, and only as a temporary expedient, because the finances would not then permit of engaging a skilled selentific director to devote all of his lime to that work. The writer has given approximately one-half of his time and much more than half of his strength to this work during the past year. It is a physical impossibility for the person serving as scientific director to carry other large responsibilities such as organizing the National work, frequently giving lectures to dental and medical associations and besides carry on a private practice for a livelihood. The finances of the department have now been developed so that a skillful Scientific or Research Director can be maintained. The Acting Managing Durector cannot longer continue to carry this threefold responsibility. Accordingly, the Executive Committee of the Board of Trustees of the Institute has recommended to that body, and that body has accepted their reconunendation, that we, as soon as practicable, engage a skilled Scientific or Research Director who will devote all of his time to the scientlfic work. A special committee is negotiating at this time. This work requires a man of very unusual ability and It becomes imperative that the fundamental policies governing the work be decided upon now, in order that a man qualified for carrying out those policies may be selected Some of the fundamental questions are-shall the Research Director necessarily be trained in the art and science of dentistry, medicine, physical chemistry, or of the seience of research and what authority and limitation shall be placed upon him by the dental profession? We have submitted these questions to about a dozen scientists who are leaders in scientific research, as well as to about twice that number of the leaders in our own profession, and the wide divergence of opinion demonstrates clearly that there is no common thought ou this question. We believe this is largely due to the fact that this is a new problem and must be given very thoro study by the leaders of our profession. The writer cousiders that two things are absolutely requisite for the development and success of the Research Department. The first is a complete endorsement by the National Dental Association, which endorsement is rapidly being provided by the support in the form of the adoption of the one dollar per member dues for research. The second is a sufficiently active participation in the affairs of the Research Department by the Officers and Trustees of the National Dental Association to make them competent to intelligently direct that work. These problems of policy have been established today in the joint meeting of the Research Commission, the Trustees of the National Dental Association and the Trustees of the Research Institute, by the adoption of the following report of the special committee appointed for that purpose:

"The committee appointed by your President to outline the policy of the Research Institute of the National Dental Association for the coming year beg leave to submit the following report:

- The committee recommends that the grants and existing contracts be continued for the fiscal year.
- 2. We further recommend that a trained pathologist and assistants he secured and placed in charge of the scientific work carried on in the Research Institute at Cleveland, who shall have the title of Research Director, Research Institute, National Dental Association. It is the belief of the committee said Director should and can be secured within the next ninety days.
- 3. That the problems studied at the Research institute shall be confined to pathological subjects, the exact nature of which shall be determined by the Research Director in conference with the Trustees of the Institute and the Trustees of the National Deutal Association.
- All work produced under the auspices of the Research Department shall be subject to review by The Journal Committee.

(Signed) THOMAS P. HINMAN.
CLARENCE J. CRIEVES.
THOMAS B. HARTZELL.
Committee."

The finances are now so well perfected that the department can be considered permanently established, for it can be maintained on the income that is now provided by the membership that has adopted the one dollar dues. This will be assisted by the income from pledges. The dental profession at large is enthusiastic in its support of the Research Department

## X. RESEARCH INSTITUTE BUILDINGS.

During the past year there has been an opportunity to test the adaptability of the buildings to the needs of the Research Department. We are glad to report that they prove to be very satisfactory. The rooms are large, airy and light, and conveniently related. The three story barn is ideally adapted for the care of the animals. Tables, benches and a special sink have been installed. Two clinical operating rooms have been completely furnished by the dental manufacturers and we wish to take this opportunity of expressing the thanks of the officers. The list of contributors is too large to permit of publishing here.

The value of the equipment, as shown by the auditor's report of June 20, 1917, is \$10,430. Notwithstanding the Interruption in the securing of contributions to the Building Fund, made necessary by the transportation of the National to the one dollar additional dues for The Journal, the mortgages have been reduced during the past year \$5,000, (\$4,500 at the time of the auditor's report June 20, 1917) and the pledges to the fund have been increased \$2,667.36. This leaves a balance on the second mortgage of \$5,000 and on the first mortgage of \$27,000 unpald, against which we have pledges for approximately \$7,000. Figuring the building at \$50,000, the original cost of the property without the normal increase in valuation of about 10% per year which has occurred, and adding the value of our equipment purchased and contributed, \$10,430.00, the building and equipment show a net worth, after deducting the mortgages, of \$28,430. This does not include our caulty in subseriptions.

#### XI. SUBSCRIPTION FUNDS.

The total subscriptions to the Research Fund, since the organization of the work in 1912, have been \$73,002.29, and the total for the Bullding and Equipment Fund is \$30,747.75. The last auditor's report of June 20 shows the total Research Fund receivable to he \$32,580, of which \$12,698 is past due. There will be some reduction in this fund by the transition to the one dollar basis. The total subscriptions to both funds to date are \$103,750.04. The auditor has found our net worth of June 20 to be \$69,317.95. This does not include our equity in our new form of endowment, in which each dentist is paying the Interest of one dollar per year on \$20 of principal.

## XII. AMENDMENTS.

There is hefore this body an amendment to the constitution of the National Dental Association which provides an increase in dues of one dollar for the support of the Research Department. It has been deemed wise by the Trustees of the National Dental Association, in conference with the Trustees of the Research Institute and the members of the Research Commission, that this amendment should not be passed this year, because some of the societles are not as yet sufficiently organized but that it would interfere with their securing memborship. They have also deemed it wise that each state society should adopt this amendment and should send the money directly to the Treasurer of the Research Institute, instead of thru the Treasurer and Secretary of the National Dental Association. This prohably is expedient. However, it

Is exceedingly Important that the work of the Research Department have the fullest possible endorsement of the National Dental Association, as well as the closest possible relationship as an integral part of it. We ask that you postpone, either indefinitely or to a fixed date, the vote on this amendment. The constitution of the National Dental Association should be amended to provide that the President-elect of the National Dental Association is, with the President and Secretary, an Exordicin member of the Research Commission.

Wo attach, herewith, the copy of the auditor's report, which shows, in splendid form, and detail, the financial condition of the department. (This report appears in this issue in the reports to the House of Delegates.)

(Note. On October 25, 1917, the House of Delegates unanimously passed the following resolution, which was recommended by the Board of Trustees:

"That state and constituent societies add one dollar to their dues for the support of the Research Institute, and the funds so collected shall be remitted directly to the Research Institute and that the Treasurer of the Research Institute report to the House of Delegates those states and constituent societies complying with this request.")

This will be a part of the Constitution and By-Laws.

Respectfully submitted,

WESTON A. PRICE.

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