Reports: Executive Committee; Secretary; Treasurer; Staff Reports; Committee Reports
ard stated that the funds of the Iowa Conservation Association have been turned over to the Academy.

The report of the Membership Committee was adopted, and the persons named therein were elected to the status recommended by the committee.

The report of the Necrology Committee, which was read and adopted, carried the names of Daniel W. Morehouse, Murray L. Hutton, C. P. Gillette, William R. B. Robertson, and Russia Harris.

The report of the Resolutions Committee was read and adopted. It carried expressions of appreciation for the services of the retiring Secretary-Treasurer and Editor, Dr. J. C. Gilman and Mrs. Florence W. Nichols, respectively.

The report of the Conservation Committee was read and adopted. It carried a recommendation for the termination of that committee. A motion to that effect occasioned some discussion, but was defeated.

The Nominating Committee presented the following slate of officers for the year 1941:

President, Roy A. Nelson, Mt. Vernon.
Vice-President, C. W. Lantz, Cedar Falls.
Secretary-Treasurer, E. R. Becker, Ames.
Editor, L. R. Wilson, Cedar Rapids.

A motion adopting the report and instructing the secretary to cast the ballot of the Academy for the election of these nominees was carried unanimously.

The section chairmen and representatives on the Executive Committee in 1941 were announced to be as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Chairman</th>
<th>Executive Committeeman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botany and Bacteriology</td>
<td>Martin L. Grant</td>
<td>Louisa Sargent 1939-43</td>
</tr>
<tr>
<td>Chemistry, General, Physical</td>
<td>H. H. Rowley</td>
<td>Jacob Cornog 1941-45</td>
</tr>
<tr>
<td>Chemistry, Organic, Biological</td>
<td>Henry Gilman</td>
<td>B. H. Peterson 1939-43</td>
</tr>
<tr>
<td>Geology</td>
<td>L. W. Wood</td>
<td>C. S. Gwynne 1938-42</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Orlando Kreder</td>
<td>C. Gouwens 1940-44</td>
</tr>
<tr>
<td>Physics</td>
<td>Grant Gale</td>
<td>E. H. Collins 1938-42</td>
</tr>
<tr>
<td>Psychology</td>
<td>M. T. Henderson</td>
<td>A. H. Lauer 1941-45</td>
</tr>
<tr>
<td>Science Teaching</td>
<td>S. M. Dietz</td>
<td>J. B. Culbertson 1938-42</td>
</tr>
<tr>
<td>Zoology</td>
<td>J. A. Adams</td>
<td>H. E. Jaques 1940-44</td>
</tr>
</tbody>
</table>

A motion that a petition be sent to Congress recommending the deferment of bona fide college students from conscription until graduation lost by a vote of 17-15.

A motion to adjourn was adopted.

E. R. Becker, Secretary.

REPORT OF THE EXECUTIVE COMMITTEE

The Executive Committee met in Room 14, Administrative Building, at 1:30 p. m., April 25th. President Charles Carter presided. Carter, Nelson, Conard, Trowbridge, Culbertson, Lantz, Wilson, Sargent, Oelke, Peterson, Gouwens, Emme, Jaques and Becker were present.

The financial status of the Academy was discussed by Dr. J. C. Gilman, the retiring treasurer.
The A. A. A. S. grant of $125.00 for research and $50.00 additional to be taken from the 1941 income from the Academy's endowment fund were appropriated for research problems now being investigated by T. C. Stephens, E. E. Emme, and U. A. Hauber.

The desirability of an exhibit of books published by members of the Academy was discussed. A motion that Professor K. A. Stiles be requested to plan such an exhibit at the next Cedar Falls meeting was adopted.

The problem of a central organization for science clubs in junior colleges was discussed. A committee consisting of Jaques, Lantz, and Oelke was selected to study the issue, and make recommendations in due time.

The invitation of Iowa Wesleyan University for 1942 Academy meeting, extended through Professor Jaques, was accepted. Cedar Falls was tentatively selected for the 1943 meeting.

Respectfully submitted,
E. R. Becker, Secretary

REPORT OF THE SECRETARY 1940-1941

Dr. Becker has asked me to make this report since it was my privilege to hold the office of secretary-treasurer until March first, the end of the fiscal year for the Academy. My resignation had been contemplated for some time but having been elected chairman of the Academy Conference of the A. A. A. S. for the Philadelphia meeting I selfishly wished to preside. Therefore the logical time for retirement was the year's end when the transfer of the affairs of the Academy into a new year would naturally occur.

The treasury of the Academy was the happy recipient of a check for $106.36 and three hundred dollars in U. S. Treasury Bonds from the Iowa Conservation Society. This money was presented to our endowment fund and brings the total holdings in this fund to $3,042.47, three times the holdings in 1934, but only a 50 percent gain over the previous high point of our endowment, which occurred in the year 1932 and was $1,956.56. In spite of the fact that dues collected were less than last year the treasury has a slightly larger balance than it had at the same time one year ago. The financial affairs of the Academy are therefore in excellent condition.

From the point of view of the secretary the advances made by the Academy have been rather slight. Our membership has dropped slightly according to the official figures submitted to the A. A. A. S. (Science 13:380) although the number (10) is probably a matter of accounting rather than real. Nevertheless I think that our membership committee might well recognize the necessity of a continued effort if we are to be kept at our maximum.

The Junior Academy's affiliation with the American Institute of the City of New York has been completed and the majority of the adjustments necessary to the new relation have been made. A few minor details remain to be ironed out but this relationship should show dividends of increasing activity in science in our high schools with corresponding responsibilities in our own group.
The Academy Conference of the A. A. A. S. has suggested that the Academies investigate the matter of membership at the college student level. Several Academies have such members; one, Texas, going so far as to have their group meet at a special time and place separate from the senior Academy. Other Academies are looking to setting up local science clubs in the colleges of the state to be affiliated with the Academy much as in the Junior Academy now. It might be well for our executive committee to be thinking about this phase of Academy work.

Last year I suggested that the Academy set up a program committee to relieve the Secretary of the burden of the general program for the meeting and to look after the entire arrangement of time of meetings and avoidance of conflicts. For those of you who have not been in close contact with this phase of the management of an Academy, may I state that the program is the most time consuming and exacting part of the secretary's office in the present set-up. If we continue to increase our numbers and with it the complications of interests, more and more time will of necessity be consumed, until it will be more than one person can do. With the change in officers the redefining of duties might well be undertaken. My suggestion is that a program committee be set up consisting of the vice-president as chairman with three other members, one of whom might well represent the medical interests and another the teaching interests of the membership. The third might be considered a member-at-large. These four persons would take care of the teaching symposium and the joint symposium with the Iowa Medical Society and the general program both Friday morning and evening. By making the vice-president, chairman, there would be no necessity for enlarging the executive committee. (That committee is already too large for efficiency.)

Since the announcement of my resignation many kind words and statements of appreciation have crossed my desk and I wish to take this opportunity to thank the senders as well as the officers of the Academy and the membership for their cooperation and help during my term of office. I enjoyed doing the work and the opportunities it gave me for increasing my acquaintance with the scientists of the state and I am sincere in my regret that other duties made it seem advisable to relinquish this position. I bespeak for Dr. Becker the same whole-hearted cooperation and assistance that it was my privilege to enjoy and the Academy has my sincere best wishes for its continued advancement and success.

Respectfully submitted,

J. C. Gilman,
Secretary-Treasurer
(Resigned March 1, 1941)

REPORT OF THE TREASURER
March 1, 1941

Receipts 1940-41

Cash on hand March 1, 1940.................................$170.86
Dues
Sales

540.05
34.25
REPORTS

A. A. S. Grant ................................................. 125.00
Interest .......................................................... 45.14
Dividend No. 9, Johnson County Bank .................. 69.61

$984.91

DISBURSEMENTS

Postage .......................................................... $ 50.80
Clerical help .................................................... 28.35
Printing ........................................................... 121.32
Addressograph ................................................... 6.24
Honoraria ......................................................... 275.00
High School Relations Committee ...................... 94.95
A. A. S. Grants .................................................. 125.00
A. A. S. Meeting ............................................... 55.35

$757.01

To Balance ........................................................ 227.90

$984.91

ENDOWMENT FUND

Receipts

Balance March 1, 1940 ......................................... $ 88.77
Fees from fellows .............................................. 18.00
Return of loan to Iowa Plants ......................... 300.00
Iowa Conservation Society ................................ 106.36
Interest .......................................................... 54.34

Cash on hand ..................................................... $ 567.47

Holdings

Federal Farm Mortgage Bond 1964 ...................... $ 500.00
Federal Farm Mortgage Bond 1949 ...................... 500.00
U. S. Treasury Bond 3% 1946 .............................. 300.00
U. S. Savings Bonds 1949 ................................ 675.00
Midland Theater First Mortgage Bond '53 .......... 300.00
Midland Investment Corp. Pfd. Stock (2 shares) .... 200.00
Union Story Trust and Savings Account ............ 567.47

$3042.47

Signed:

JOSEPH C. GILMAN,
Treasurer

REPORT OF THE AUDITING COMMITTEE

March 5, 1941—Your committee appointed to audit the books of the
Iowa Academy of Science wish to make the following report. We have
received the books from the secretary and treasurer, Dr. J. C. Gilman,
and we have carefully checked the assets and liabilities of the Academy and find that the books are in excellent form.

(Signed) — I. E. Melhus  
J. A. Wilkinson  
M. F. Fritz

REPORT OF THE FINANCE COMMITTEE

The "Report of the Treasurer" and the "Endowment Fund" status have been examined and approved by the members of the Finance Committee. Again a good balance is on hand at the end of the fiscal year.

Of special note this year is the addition to the endowment fund of $567.47, which was received from the return of funds formerly tied up in the Union Story and Savings Bank account of the Academy. It is reported that some additional funds may be recaptured.

Also, since our report of a year ago, Dr. Henry Conard has submitted from the old funds of the Iowa Conservation Association three treasury bonds of $100.00 each, and a check for $101.50 with the suggestion that they be added to the revolving fund for publication at the disposal of the Biological Survey Committee. These are now listed under the receipts and holdings of the Endowment Fund.

Respectfully submitted,
Committee on Finance,
U. A. Hauber  
E. W. Lindstrom  
H. S. Nollen  
J. B. Culbertson, Chairman  
April 25, 1941

REPORT OF THE MEMBERSHIP COMMITTEE

New Life Fellows
Jones, David T. (Transferred), Vinton, Iowa.

New Fellows
Daniells, Marian E. (Transferred), Mathematics Department, Iowa State College, Ames, Iowa.
Diehl, H. C., Chemistry Department, State University, Iowa City, Iowa.
Glockler, George, Chemistry Department, State University, Iowa City, Iowa.
Huff, George C. (Transferred), Drake University, Des Moines, Iowa.
Iron, Arthur L., Psychology Department, State University, Iowa City, Iowa.
Jones, David Tracy (Transferred), 818 E. 5th St., Vinton, Iowa.
Kalina, Martin H., Chemistry Department, State University, Iowa City, Iowa.

New Associates
Adams, Wallace W., North Liberty, Iowa.
Allen, Ted, Mt. Pleasant, Iowa.
Bair, Roy A., Botany Department, State College, Ames, Iowa.
Bates, Herbert T., Chemical Engineering, State College, Ames, Iowa.
Baxter, Richard, Mt. Pleasant, Iowa.
Benson, Edward, 4045 Amherst, Des Moines, Iowa.
Blexrud, Owen, 803 E. College, Iowa City, Iowa.
Brand, Mary J., Grand Junction, Iowa.
Carstensen, G. D., Mt. Pleasant, Iowa.
Cochran, W. G., Statistical Laboratory, Iowa State College, Ames, Iowa.
Curtis, Dwight K., 530 Ferson, Iowa City, Iowa.
Davis, Dan A., Geology Department, Iowa State College, Ames, Iowa.
Dodd, C. M., Ceramic Engineering, Iowa State College, Ames, Iowa.
Drexler, Robert, Coe College, Cedar Rapids, Iowa.
Edwards, James F. (M. D.) Hospital, Iowa State College, Ames, Iowa.
Emme, Eugene M., Morningside College, Sioux City, Iowa.
Freyermuth, Harlan B., 114 E. Market St., Iowa City, Iowa.
Goldsmith, William M., 1927 University Ave., Dubuque, Iowa.
Gwen, J. W., Genetics Department, Iowa State College, Ames, Iowa.
Harvalik, Fabor V., Physics Department, St. Ambrose College, Davenport, Iowa.
Hilbe, James J., 1000 College Ave., Des Moines, Iowa.
Holmes, John, Personnel Office, Iowa State College, Ames, Iowa.
Jerrel, Elizabeth, 404 Lincoln, Mt. Pleasant, Iowa.
Kos, Charles G., 1025 Ellis Blvd., Cedar Rapids, Iowa.
Larson, Finn, Adrian, Minnesota.
Larson, Flavia, 114 Campus Ave., Ames, Iowa.
Larson, G. D., 5 E. Fairfield, Iowa City, Iowa.
Lewis, Earl, Psychology Department, Coe College, Cedar Rapids, Iowa.
Lockridge, Lowell Junior College, Red Oak, Iowa.
Lonseth, A. T., Mathematics Department, Iowa State College, Ames, Iowa.
McClelland, James, Drake University, Des Moines, Iowa.
Martinson, Glenn O., 158 Hyland, Ames, Iowa.
Merriam, Mary Helen, Psychology Department, Iowa State College, Ames, Iowa.
Mickle, Ernest, Coe College, Cedar Rapids, Iowa.
Owen, Billy, Zoology Department, Iowa Wesleyan College, Mt. Pleasant, Iowa.
Owens, Wm. A., Psychology Department, Iowa State College, Ames, Iowa.
Patterson, Mary, Morningside College, Sioux City, Iowa.
Pévé, Troy, Geology Department, State University, Iowa City, Iowa.
Pierce, Guy Russell, 314 So. Dubuque, Iowa City, Iowa.
Price, H. Vernon, University High School, Iowa City, Iowa.
Radloff, Joseph, Hamilton Seed and Coal Co., Cedar Rapids, Iowa.
Platz, G. G., Lamoni, Iowa.
Pullman, Robert, Morningside College, Sioux City, Iowa.
Rich, Catherine, Morningside College, Sioux City, Iowa.
Romm, H. J., Tuskegee Institute, Alabama.
Rothe, Erich, Mathematics Department, Iowa State College, Ames, Iowa.
Russel, John, Iowa Wesleyan College, Mt. Pleasant, Iowa.
Savage, David, Solem, Iowa.
Shafer, W. M., Chemistry Department, Iowa State College, Ames, Iowa.
Swygard, Bill, Libertyville, Iowa.
Swenson, Frank, 1018 E. Rusholme, Davenport, Iowa.
Timm, Edgar W., Genetics Department, State College, Ames, Iowa.
Trimble, H. C., 2211 Meiner Ave., Cedar Falls, Iowa.
Tulk, Marvin E., Iowa Wesleyan College, Mt. Pleasant, Iowa.
Uhlman, Julius E., Psychology Department, Iowa State College, Ames, Iowa.
Underwood, B. J., Psychology Department, State University, Iowa City, Iowa.
Uthoff, Lualis, Bartan Hall, Iowa State College, Ames, Iowa.
Webster, Ruth, Van Buren School, Cedar Rapids, Iowa.
Wendland, Ray, Chemistry Department, Coe College, Cedar Rapids, Iowa.
Wilhelm, Harley A., Chemistry Department, Iowa State College, Ames, Iowa.

Respectfully submitted,
R. W. GETCHELL
D. L. HOLL
PAUL KAMBLY
L. R. WILSON, Chairman

REPORT OF THE EDITOR

To the President and Members of the Iowa Academy of Science:

The annual proceedings, for 1940, of the Iowa Academy of Science is published in volume 47. This volume contains 428 pages. The first 48 pages record the list of officers and members; annual reports of officers and committees, and the In Memoriam section, while 370 pages are devoted to the section papers and 10 pages to index.

The section chairmen gave their assistance in preparation of the papers for publication, and as members of the editorial committee the chairmen were most helpful. The cooperation of the chairmen was one of the necessary links in the procedure of preparing papers to insure more prompt publication of the Proceedings.

The task of preparing the Proceedings for the past ten years has been a pleasant one for the editor and she wishes to express her appreciation to the officers, chairmen and authors who have given of their time and interest, and to the former secretary, Dr. Gilman, who has been a helpful advisor.
In relinquishing the office the retiring editor wishes to ask for the continuance of the same helpful cooperation from members of the Academy to the incoming editor.

Respectfully submitted,

Florence W. Nichols, Editor
April 24, 1941

THE REPORT OF THE IOWA STATE COLLEGE LIBRARY TO THE IOWA ACADEMY OF SCIENCE FOR THE YEAR ENDED MARCH 1, 1941

NUMBER OF INSTITUTIONS ON MAILING LIST

| Domestic | 122 |
| Foreign  |  57 |
|          | 179 |

NUMBER OF PUBLICATIONS RECEIVED FROM THESE INSTITUTIONS

| Domestic | 191 |
| Foreign  | 144 |
|          | 335 |

NUMBER OF PUBLICATIONS RECEIVED IN DIRECT EXCHANGE

| Domestic | 55 from 41 institutions |
| Foreign  |  27 “ 21 “ |
|          |  82  62 |

NUMBER OF PUBLICATIONS RECEIVED IN EXCHANGE FOR IOWA ACADEMY OF SCIENCE PROCEEDINGS PLUS PUBLICATIONS OF IOWA STATE COLLEGE

| Domestic | 290 from 52 institutions |
| Foreign  | 151 “ 35 “ |
|          | 441  87 |

Note: These publications were received for a combination of the Iowa Academy of Science Proceedings with any of the following: Iowa State College Journal of Science, Iowa Agricultural Experiment Station publications, Iowa Engineering Experiment Station Bulletin.

Institutions on the Mailing List From Which We Received Nothing in Return (Gift Copies)

6 U. S. Government Agencies
22 Iowa Libraries
2 Foreign Institutions (For abstracting)
30
Number of Back Volumes of the Proceedings of the Iowa Academy of Science Sent on Exchange

25 to One Foreign Institution 15 Volumes Received in Exchange
27 to Four Domestic Institutions 52 Volumes Received in Exchange

52 to Five Institutions 67 Volumes Received in Exchange

Number of Copies Sent Out of Iowa Academy of Science Proceedings

Vol. 46

Membership .......................... 619
Exchange ............................ 171
Subscription .......................... 9

Report of the Committee on Biological Survey

The Committee on Biological Survey reports that the funds of the defunct Iowa Conservation Association have been turned over to the Academy. Although it is stipulated that this fund incurs no obligation whatsoever on the part of the Academy, it is suggested that it be used if needed to add to the Publication Fund that is kept subject to call by the Committee on Biological Survey. The two publications so far sponsored by the Committee and the Academy are moving actively. This is testimony to the wisdom of the action of the Academy in the matter. It is hoped that other manuscripts will be offered which the Academy may similarly sponsor.

Respectfully submitted,

Robert B. Wylie
H. E. Jaques
C. W. Emmons
T. C. Stephens
I. E. Melhus
H. S. Conard, Chairman

Report of the High School Relations Committee

Our committee has continued to endeavor to further the work of the Junior Academy. This is the first year in which the Junior Academy has been affiliated with the American Institute of New York City. While there are a number of details to be worked out before the affiliation is working smoothly, it seems evident that this relationship will be helpful to the clubs in our organization. The publications of the American Institute now are furnished to our clubs and the Institute's Photographic Salon has been used by some high schools and has been on exhibition at this convention.

The creation of the office of permanent secretary of the Junior Academy has proved to be advantageous in providing a central office for directing the work in the state and in coordinating the work with the American Institute. Mr. D. C. Stroud of Des Moines has rendered commendable service as secretary.
More interest is being shown in the essay contest started two years ago and it should be continued. This offers an opportunity for more boys and girls to participate in the activities of the clubs locally and at the annual convention. A News Letter has been issued and distributed to the clubs. The editing and printing of this publication has been done by the Iowa City High School Club under the able direction of Mr. Charles Trachsel, the Junior Councillor.

There has been some inquiry concerning extending the Junior Academy into the Junior Colleges. This has been referred to the Executive Committee of the Iowa Academy of Science.

The annual convention was held at the Indianola High School. There were 50 delegates representing 10 clubs present. The total registration was 130. We wish to express our appreciation to the faculty and students of the high school for their hospitality and the efforts that they have made in making this a successful convention.

The Committee wishes to express its appreciation to Dr. J. C. Gilman at this time for his untiring efforts in establishing and promoting the Junior Academy movement in Iowa. He, more than any other person, has been responsible for the success of this movement in Iowa and he also has been one of the most active men in promoting the Junior Academy idea in the United States.

The awards given this year are as follows:

**Physical Sciences**
- Superior Mineral Collection
  - East High School, Des Moines
- Excellent Acoustic Mirrors
  - Iowa City High School
- Excellent Stroboscopic Principles
  - Iowa Falls High School

**Biological Sciences**
- Superior Biological Models
  - Cedar Falls High School
- Excellent Bee Keeping
  - Cedar Falls High School

**General Science**
- Superior Earth, Sun, Moon
  - Amos Hiatt Junior High School, Des Moines
- Excellent Printing and Enlarging
  - Amos Hiatt Junior High School, Des Moines

**Mathematics**
- Superior Transit
  - Cedar Falls High School
- Excellent Applications of Mathematics
  - Iowa Falls High School
- Excellent Slide Rule
  - Iowa Falls High School

**Sweepstakes**
- Superior Cedar Falls High School
- Excellent Marion High School
- Excellent Iowa Falls High School

**Essay**
- Superior Charlotte Hitchcock—“Narcotics”
  - Cedar Falls High School
- Excellent Gordon Vallentine—“Aerodynamics”
  - Cedar Falls High School
- Excellent Marjorie Kosina—“Migration of Birds”
  - Woodrow Wilson High School, Cedar Rapids
The officers elected by the Junior Academy for the year 1941-42 are:

President      James Long       Iowa Falls High School
Vice President Gordon Vallentine Cedar Falls High School
Secretary      Eileen Schenken     Marion High School
Treasurer      Tom Taylor         Amos Hiatt Junior High School, Des Moines

The Committee asks the Iowa Academy to confirm the appointment of the following officers for the next year:

Senior Councillor Chas. Trachsel Iowa City High School
Junior Councillor Robert Haupt Marion High School
Permanent Secretary D. C. Stroud Amos Hiatt Junior High School, Des Moines

We wish to especially commend Mr. John Bliese of the Cedar Falls High School for his two years of devoted service as Senior Councillor.

Respectfully submitted,
HIGH SCHOOL RELATIONS COMMITTEE
C. W. LANTZ, Chairman

REPORT OF RESOLUTIONS COMMITTEE

1. Be it resolved that the Academy extend to Dr. J. C. Gilman its sincere appreciation of his more than a decade of valuable and efficient service as Secretary-Treasurer; for his successful effort in the organization of the Junior Academy and the Academy-sponsored radio programs; and for the initiation and development of the Medical Section.

2. It is with regret that the Committee learns that Mrs. Florence Nichols is retiring as editor of the Academy proceedings. Likewise to her we extend our sincere appreciation for faithful services.

3. Relative to National Defense, the Iowa Academy of Science resolves that:
   a. We urge that college youth be encouraged to continue their educational and vocational preparation until officially summoned to serve their country.
   b. We re-emphasize our enduring belief that education and the search for truth should continue untrammeled and our appreciation of life in a society that encourages the development of scientific thought.
   c. As Academy members, we offer such scientific skill as we possess to the National Defense Program.

4. Be it resolved that the officers and members of the Iowa Academy of Science, in executive session assembled, express to the local Committee on arrangements, to the President, staff and students of Simpson College, our sincere appreciation for their hospitality as well as for making all program and housing arrangements for one of the Academy's most successful and enjoyable meetings.

Be it further resolved that the Academy also convey its thanks to the Brass Sextet of the Indianola High School for the excellent program of dinner music and to the Methodist Church for providing facilities for the Annual Academy Dinner.
The Secretary is asked to communicate a copy of the last resolution to
the local committee, to President Gross, to the Methodist Church and to
the High School Sextet.

W. F. Loehwing
George Huff
E. E. Emme, Chairman