The work is a serious attempt to foster a growing interest in native plant life, and we wish it well. For increased knowledge and wider intelligent interest in the native plants and the part they play in the economy of the state is imperative if we are to develop a sound scientific policy of conservation that will be supported by the public. Up to date the public's policy toward our national resources too often has been on a par with the recent economic policy of "spending ourselves rich."

STANFORD UNIVERSITY

LEROY ABRAMS

REPORTS

FINANCES OF THE AMERICAN ASSOCIA-TION FOR THE ADVANCEMENT OF SCIENCE

Is the American Association for the Advancement of Science in a sound financial condition? Its income statement and balance sheet of course answer that question. But they are in language we do not ordinarily use and consequently do not readily understand. Consequently I will make a few explanatory and supplementary remarks on the financial tables which follow.

The property of the association, aside from office equipment and supplies, consists primarily of its permanent funds, which are in the form of cash and securities, and title to SCIENCE and The Scientific Monthly, which were transferred to the association by Dr. J. McKeen Cattell in December, 1938. It will be seen on examining the balance sheet of the treasurer which follows that on last September 30 the investments of the association in securities and mortgages amounted to about \$253,000. The portfolio of investments of the association has recently been examined by several groups of financial experts and pronounced on the whole satisfactory. However, the council at its meeting in Columbus elected Frederick P. H. Siddons, secretary of the American Security and Trust Company, of Washington, as chairman of the finance committee in order to provide the association expert advice on financial problems.

SCIENCE and The Scientific Monthly were sold to the association subject to a contract to pay to Dr. Cattell or his estate for ten years an annuity amounting to the average of half of the annual net profits of these journals for the five years preceding the date of their transfer. With the steadily increasing membership and circulation of the journals, these journals should be a source of substantial income, especially after payment for them shall have been completed. At that time, even if the membership of the association should not increase in the interval, they will exceed in value all other present assets of the association. The only serious hazard is that an inflation in this country will develop and greatly increase the cost of printing the journals.

TREASURER'S REPORT

Under the constitution of the association the treas-

urer is the custodian of the permanent funds of the association. The following balance sheet shows the assets and liabilities of the association, aside from the largely current assets and liabilities of the permanent secretary's office, which are contained in a separate report.

ASSETS (FROM	TREASURER'S	REPORT)	•

Securities and mortgages Cash available for investment Cash available for current needs	13.420.83
Total assets	\$282,604.25

LIABILITIES (FROM TREASURER'S REPORT)

Endowment (for research) Endowment (for general purposes)	$\$115,761.45 \\95,838,38$
Endowment (for emeritus life memberships)	5.000.00
Endowment (for emeritus annual memberships).	500.00
Reserve fund	36,941.61
Annual \$1,000 prize fund	3,000.00
Unused grants to affiliated academies	435.00
Special gift Permanent secretary's fund	$\begin{array}{r} 60.82 \\ 12.480.14 \end{array}$
Accumulated income not appropriated	12,586.85
Total liabilities	\$282,604.25

It will be evident from this balance sheet that the treasury of the association is in a sound condition. The future will of course depend upon the income and expenses. The following table contains the cash receipts and disbursements of the treasurer for the year ended September 30, 1939, aside from cash received for called securities and cash paid out for purchased securities, and a few other small items not of a recurring nature.

CASH RECEIPTS (FROM TREASURER'S REPOR	r)
Income from investments For endowment, fees of new life members Revertments from appropriations, etc Special gift	$\begin{array}{c} \$ & 9,466.43 \\ & 5,000.00 \\ & 101.06 \\ & 60.82 \end{array}$
Total	\$14,628.31
CASH DISBURSEMENTS (FROM TREASURER'S RE	PORT)
Grants in aid of research Grants to affiliated academies Maiben lecture (Milwaukee meeting) Life and 50-year member subs. to journals Miscellaneous disbursements Appropriation for emeritus life membership	$\begin{array}{c} \$ \hspace{0.2cm} 2,\!128.75 \\ \hspace{0.2cm} 2,\!615.00 \\ \hspace{0.2cm} 283.12 \\ \hspace{0.2cm} 1,\!668.00 \\ \hspace{0.2cm} 116.89 \\ \hspace{0.2cm} 4,\!500.00 \end{array}$
Total	Concerning and the second seco

These cash receipts exceeded the cash disbursements by \$3,316.55. The treasurer also provided \$1,000 for the Thousand Dollar Prize from reserves for the purpose.

In addition to the foregoing receipts and disbursements, the treasurer received \$13,025 for bonds that had been called and disbursed \$10,770.83 for securities purchased by authority of the finance committee, leaving a balance of \$5,570.72 in the treasury from the two items. After taking into account all the special non-recurring items, the cash in the treasury at the close of the year exceeded that at the beginning by \$4,570.72. If this amount were all invested in securities, the income from it would barely make up for the loss of income due to the fact that securities purchased now bear considerably lower rates of interest than those which were retired.

PERMANENT SECRETARY'S REPORT

Under a provision of the constitution and by action of the council, the permanent secretary collects all dues of members and pays all operation expenses of the association.

The following is a condensed statement of income and expense of the office of the permanent secretary for the fiscal year ended September 30, 1939.

INCOME (FROM PERMANENT SECRETARY'S REPORT)	
Annual membership dues and fees	$03.50 \\ 40.00 \\ 38.00 \\ 81.40$
Total income \$96,39	92.90
EXPENSE (FROM PERMANENT SECRETARY'S REPORT)	
Printing and stationery 1.57 Postage 2,17 Telephone and telegraph 12 Miscellaneous office expenses 55 General sceretary's office 67 Treasurer's office 67 Richmond meeting (net) 1.44 Milwaukee meeting (net) 1.90 Reserve for publication of proceedings 1.00 Miscellaneous section expenses 36 Travel expenses (exec. com. and perm. sec.) 51 Miscellaneous section 31 Thiscellaneous 32	
Total expense	79.45

Deficit for fiscal year ended Sept. 30, 1939 886.55

By far the largest item of expense of the association is the subscriptions to SCIENCE and *The Scientific Monthly* for its members. Not all of this amount is an expense in the ordinary sense of the term, for a part of it is payment on the purchase of the journals and therefore in the nature of capital investment. The agreement between Dr. Cattell and the association does not define the amount of this advance payment in numbers, but it is several times the deficit. Consequently the operations of the association are not leading it into financial difficulties. It is hoped, however, that even on the present system of accounting there will be no deficit this year.

The items for printing, stationery and postage are also large, perhaps surprisingly large for those who have not thought through the necessary expenses for these things. Even to send out one letter to every member of the association costs about \$1,600. From

 $^1\,{\rm From}$ the treasurer for life members and emeritus members whose memberships are endowed.

last October 1 to December 31 approximately 175,000 pieces of mail, or about 2,000 pieces daily, were sent out from the office of the permanent secretary, part of which was for circularization and part for the symposia of the association. The expenses for the latter are charged directly to the symposia accounts.

It will be observed that the meetings of the association cost substantial amounts after crediting them with the registration fees and the profit from the scientific exhibition, for the association is responsible for all expenses for arrangements and for providing equipment, both for its sections and for the societies that meet with it. This is one of its services to its affiliated and associated societies. Another is the sponsoring and publishing of symposia, the accounts for which are not included in these statements because they are special projects that are expected to be selfliquidating.

The foregoing statements will probably be clearer when reduced to the member basis. The natural question for the member is what becomes of the money he pays as dues. The following condensed table tells the story:

DISTRIBUTION OF MEMBER'S ANNUAL \$5 DUES	
Journal	$3.000 \\ 1.002$
Salaries, office of perm. sec Circularization	.272
Printing, stationery, postage Allowances to divisions	.184 .112
Meetings (net)	.152
Reserve for proceedings	.049 .273
-	
Total Deficit	

There are several ways in which the deficit of 4.4 cents per member might have been avoided. For example, the large expenditures for circularization for new members might have been reduced, a question which will be discussed in a later report on membership. Or a larger percentage of the members of affiliated societies for which the association provided facilities at its meetings might have registered. Or, finally, the members who carelessly neglected to pay their duties until duplicate bills had been sent them might have paid them more promptly. In fact, if all members had paid their bills within three months of the time they were billed there would have been practically no deficit.

A question every member of the association may ask is whether his dues of a little less than 1.4 cents per day is a wise investment in his own satisfaction and in the advancement of science.

> F. R. MOULTON, Permanent Secretary

SURVEY OF RESEARCH IN INDUSTRY

WITHIN the past few months the National Research Council has been requested by the National Resources Committee (now organized as the National Resources