

7,500 pounds per acre per year. This deduction of course assumes that the dust falls occur with equal frequency throughout the year. Recognizing that such an assumption is not warranted, we have made careful observation for the last three years to estimate whether the calculated amount might be below or above the actual. And though accurate measurements have been impossible we are convinced that at least the amount given is deposited in this way each year. The annual accumulation, however, does not differ widely from this figure. Many times repeated determinations of the weight of an acre foot of this soil show it to be very close to 2,450,000 pounds per acre. At the rate of accumulation just given it would require 326 years for the deposition of one foot, or approximately four inches is deposited in one century. This is four times as much as estimated by Free. If no erosion took place during deposition, according to this estimate, 25,000 years were necessary for the deposition of the seventy-five feet of soil that covers the lava beds on this plateau.

Considerable further work has been done by the writer along this line but does not bear directly upon the mode and rate of formation of this soil. The work is now to be discontinued unless some one else will take it up. A fine problem is presented in historical geology or physiography, and it is hoped that some person remaining in the vicinity of these interesting deposits will find time to take up a study of them. A measurement of the depth of the soil and more accurate measurements of the rate of deposition are problems that will lead to extremely interesting deductions regarding the age of the various lava outflows.

P. P. PETERSON

IDAHO FALLS, IDAHO

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE REPORT OF THE TREASURER FOR 1921

IN conformity with Article 15 of the Constitution and by direction of the Council, the treasurer has the honor to submit the following report for the period December 23, 1920, to December 19, 1921, both inclusive.

The total of cash receipts during the year is \$7,064.65. Disbursements made in accordance with directions of the Council amounted to \$7,959.93. These include \$2,172.36 for purchase of \$2,500 of the United States Second Liberty Loan bonds for the association and held as an investment.

The total amount of funds of the association consisting of cash, cost value of securities purchased, and appraised value of securities received from the Colburn estate is \$121,414.77.

A detailed statement is appended.

ROBERT S. WOODWARD,
Treasurer.

WASHINGTON, D. C.,
DECEMBER 19, 1921

BALANCE SHEET—DECEMBER 19, 1921

ASSETS

<i>Investments:</i>	
Securities (Exhibit "A").....	\$121,414.77
Cash in banks.....	5,585.90
	<hr/>
	\$127,000.67

LIABILITIES

<i>Funds:</i>	
Life and Sustaining Membership:	
438 at \$ 50	\$21,900
16 at \$100	1,600
6 Sustaining	6,000
	<hr/>
	\$ 29,500.00
Jane M. Smith Fund.....	5,000.00
W. Hudson Stephens Fund.....	4,381.21
Colburn Fund.....	77,755.74
Accumulated Investments.....	4,777.82
Unappropriated Interest.....	5,585.90
	<hr/>
	\$127,000.67

CASH STATEMENT

RECEIPTS

1920	
Dec. 23—Balance from last report.....	\$ 6,481.18
Interest from securities.....	\$5,834.24
Interest from bank balance....	30.41
Revertment of grant made to	
Theo. Hough	100.00
11 life commutations, 1921....	1,100.00
	<hr/>
	7,064.65
	<hr/>
	\$ 13,545.83

DISBURSEMENTS

<i>Investments:</i>	
\$2,500 U. S. Second Liberty Loan:	
Purchase price.....	\$2,170.80
Interest purchased.....	38.07
Commission	1.56
	<hr/>
	\$ 2,210.43
<i>Grants:</i>	
Gerald L. Wendt.....	\$ 200.00
Graham Edgar.....	200.00
Sebastian Albrecht.....	200.00
Caroline E. Furness.....	200.00
Frank B. Taylor.....	300.00

Seismological Society of America	200.00	
P. W. Whiting.....	200.00	
N. A. Cobb.....	450.00	
Geo. B. Rigg.....	300.00	
T. R. Garth.....	150.00	
E. G. Boring.....	150.00	
A. L. Kroeber.....	200.00	
Frank A. Hartman.....	150.00	
W. E. Garrey.....	200.00	
Carl J. Wiggers.....	150.00	
W. F. G. Swann.....	150.00	
H. M. Randall.....	250.00	
Walter G. Cady.....	200.00	
Paul F. Gaehr.....	100.00	
A. L. Foley.....	100.00	
Helen H. Roberts.....	150.00	
Solomon Lefschetz.....	150.00	
Frank P. Knowlton.....	150.00	
	<hr/>	4,500.00
Subscriptions to SCIENCE on account of life members: 343 members at \$3.....	1,029.00	
2 life memberships from Jane M. Smith Fund	200.00	
Rental of safe deposit box.....	20.00	
Foreign exchange.....	.50	
	<hr/>	\$ 7,959.93
Cash in banks:		
Fifth Avenue Bank, N. Y.....	\$4,345.57	
U. S. Trust Company, N. Y.....	1,240.33	
	<hr/>	5,585.90
	<hr/>	\$ 13,545.83

(Exhibit "A")

SCHEDULE OF SECURITIES
SECURITIES PURCHASED

Par Value	Purchase Value
\$ 10,000 Chicago & Northwestern Railway Co. general mortgage 4 per cent. bonds, due 1987..	\$ 9,425.00
10,000 Atchison, Topeka & Santa Fe Railway Co. general mortgage 4 per cent. bonds, due 1995	9,287.50
10,000 Great Northern Railway Co. first and refunding mortgage 4.25 per cent. bonds, due 1961	10,050.00
10,000 Pennsylvania Railroad Co. consolidated mortgage 4.5 per cent. bonds, due 1960..	10,487.50
10,000 Chicago, Burlington & Quincy Railroad Co. general mortgage 4 per cent. bonds, due 1958	9,350.00
10,000 Union Pacific Railroad Co. first lien	

and refunding mortgage 4 per cent. bonds, due 2008	9,012.50
10,000 Northern Pacific Railway Co. prior lien railway and land grant 4 per cent. bonds, due 1997	9,187.50
10,000 New York Central & Hudson River Railroad Co. 3.5 per cent. bonds, due 1997	8,237.50
100 U. S. First Liberty Loan bonds.....	91.25
10,500 U. S. Second Liberty Loan bonds..	10,172.36
2,000 U. S. Third Liberty Loan bonds.....	2,000.00
2,000 U. S. Fourth Liberty Loan bonds..	2,000.00
6,500 U. S. Victory Liberty Loan bonds..	6,373.66
	<hr/>
	\$ 95,674.77

BONDS FROM COLBURN ESTATE

Appraised Value

20,000 Acker, Merrill & Condit Co. debenture 6 per cent. bonds	\$13,600.00
7,000 Buffalo City Gas Co. first mortgage 5 per cent. bonds	1,540.00
8,000 Park & Tilford Co. sinking fund debenture 6 per cent. bonds	6,400.00
42,000 Pittsburgh, Shawmut & Northern Railroad first mortgage 4 per cent. bonds, due Feb. 1, 1952.....	4,200.00
	<hr/>
	25,740.00
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\$178,100	\$121,414.77

All of the above named securities except those from the Colburn Estate are registered in the name of the association.

I certify that I have audited the accounts of the Treasurer of the American Association for the Advancement of Science for the period December 23, 1920, to December 19, 1921; that the securities representing the investments of the association have been exhibited and verified; and that the income therefrom has been duly accounted for.

The financial statements accompanying the Treasurer's report are in accord with the books of the association and correctly summarize the accounts thereof.

HERBERT A. GILL,
Auditor.

Dated, December 19, 1921.