THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT OF TEACHING

EIGHTEENTH ANNUAL REPORT
OF THE
PRESIDENT AND OF THE TREASURER

522 FIFTH AVENUE
NEW YORK CITY
1923

D. B. UPDIKE · THE MERRYMOUNT PRESS · BOSTON

378.31
C21a
1923

OFFICERS OF ADMINISTRATION AND TRUSTEES

Henry Smith Pritchett	*President*
Robert A. Franks	*Treasurer*
Clyde Furst	*Secretary*

TRUSTEES

James Hampton Kirkland	*Chairman*
Walter C. Murray	*Vice-Chairman*
Samuel Plantz	*Secretary of the Board*

Frank Aydelotte
William Lowe Bryan
Marion Le Roy Burton
Nicholas Murray Butler
Thomas Morrison Carnegie
George Hutcheson Denny
Albert Bledsoe Dinwiddie
Robert Falconer
Frederick Carlos Ferry
Robert A. Franks
John Grier Hibben
Albert Ross Hill
Alexander Crombie Humphreys
Henry Churchill King
Thomas William Lamont
Abbott Lawrence Lowell
William Allan Neilson
Henry Smith Pritchett
Rush Rhees
Henry Suzzallo
Frank Arthur Vanderlip
Robert Ernest Vinson

EXECUTIVE COMMITTEE

Henry Smith Pritchett, *ex officio*

Nicholas Murray Butler
Robert Falconer
Frederick Carlos Ferry
Robert A. Franks
Alexander Crombie Humphreys
Frank Arthur Vanderlip

151783

CONTENTS

REPORT OF THE PRESIDENT

PART I

PROCEEDINGS OF THE TRUSTEES AND OF THE EXECUTIVE COMMITTEE

	PAGE
Endowment, Reserves, Income, and Expenditure	4
Meeting of the Trustees	5
Proceedings of the Executive Committee	6
Summary of Allowances granted and in force	7
Total Cost of Retiring Allowances and Pensions in Associated and Non-Associated Institutions	12
Geographical Distribution of Retiring Allowances	15

PART II

BUSINESS OF THE YEAR

The Activities of the Foundation	19
Progress of the Teachers Insurance and Annuity Association	21
Formal Action of Colleges and Universities in the Establishment of Old Age Annuities	26
The Life Expectation of College Teachers	32
The Abuse of Intercollegiate Athletics	33
The Influence of Alumni upon their Colleges	38

PART III

THE DIVISION OF EDUCATIONAL ENQUIRY

Legal Education	43
Comparative Professional Statistics	43
Bar Admission Rules	46
Law Schools	52
Restatement of American Law	62
The Study of Dental Education	63

PART IV

THE TEACHER'S RESPONSIBILITY FOR OUR EDUCATIONAL INTEGRITY

The Rising Cost of Education 71
What is Education? 73
The School as an Agency of Civilization 77
The Unseen Transformation of Human Institutions 79
The Relation of the Public School to the Trades and Crafts 85
The Sifting of the Present Day Curriculum 88
The Teacher's Responsibility to Civilization 90

PART V

PENSION SYSTEMS AND PENSION LEGISLATION

Recent Developments in Teachers Pensions 95
Pension Amendments 98
California 99
Kansas 101
Maine 101
Minnesota 102
Minneapolis and St. Paul 104
Philippine Islands 105
Washington 106
Federal Pensions 107
American Museum of Natural History 108
Industrial Pensions 110

PART VI

De Mortuis 113

∴

REPORT OF THE TREASURER 129
INDEX 155

REPORT OF THE PRESIDENT

PART I

PROCEEDINGS OF THE TRUSTEES AND OF THE EXECUTIVE COMMITTEE

REPORT OF THE PRESIDENT

To the Chairman and the Trustees of the Carnegie Foundation for the Advancement of Teaching:

In accordance with the by-laws, I present herewith the Eighteenth Annual Report of the President of the Foundation, for the year ending June 30, 1923.

In addition to the usual business of the Foundation, the year's work included the further development of the Foundation's plan of insurance and annuities, through the Teachers Insurance and Annuity Association, which is dealt with fully in later pages. The general study of pension systems has continued without abatement.

For the Division of Educational Enquiry the report includes a statement of progress upon a pioneer study of Dental Education, together with material relating to the study of Legal Education.

For the two years ending September 30, 1923, I have served as Acting President of the Carnegie Corporation at the request of the trustees of that organization. This duty has necessarily occupied a great part of my time as well as the whole time of Dr. William S. Learned, who has served most effectively as Assistant to the President. In recognition of the amount of time devoted to their service, the trustees of the Carnegie Corporation have paid during these two years half of my salary as President and the whole of Dr. Learned's salary. Fortunately, the post of President of the Carnegie Corporation has been filled by the election of Dr. Frederick Paul Keppel, who will assume the place on October 1, 1923. Under this arrangement, I shall again be able to devote my full time to the administrative work of the Carnegie Foundation and to the educational studies which it has in progress.

I venture to call the attention of the trustees to the fact that I am also acting, by their direction, as President of the Teachers Insurance and Annuity Association. This agency, devised after long study for the purpose of enabling the teachers of the United States and of Canada to obtain, by reasonable payments, protection against both the hazard of premature death and of old age, has now been tried by experience and has been found to fulfil most successfully the purpose for which it was designed. The trustees of the Foundation need to recognize, however, that they will have in the future an increasing responsibility with respect to the Association. While it is an entirely separate organization, conducted by its own board of trustees and operated under the Insurance Laws of the State of New York, it is nevertheless the child of the Carnegie Foundation and the outcome of the long experience and study of the pension problem carried out by the Foundation. Furthermore, the Foundation assumed a certain financial responsibility for the Association with respect to the overhead costs whenever they shall exceed the income accumulated from the fund provided by the Carnegie Corporation as capital and surplus. This financial responsibility will be a small one. The increase in overhead costs is comparable to the addi-

tion of a very small number of retiring allowances to the regular list of the Foundation. There is, however, a larger responsibility involved. The success of the Teachers Insurance and Annuity Association means that it is rapidly becoming a large financial enterprise. The assets of the Association amounted on June 30, 1923, to $2,858,467, and they will be increased during the present year by approximately $1,000,000. The supervision of this growing agency is itself an increasing responsibility. Whether the President of the Carnegie Foundation shall continue to act as President of the Insurance and Annuity Association will be a matter that some time in the future the trustees of the Foundation must consider.

ENDOWMENT, RESERVES, INCOME, AND EXPENDITURE

THE trustees held in trust on June 30 the following securities, given at their face value:

(*a*) General Endowment	
United States Steel Corporation 50 year 5 per cent Gold Bonds	$12,000,000
Other securities	3,192,000
Total	$15,192,000
(*b*) Division of Educational Enquiry	1,292,000
(*c*) Reserve Fund Number One[1]	9,658,000
(*d*) Reserve Fund Number Two[2]	758,000
(*e*) Emergency Reserve[3]	429,000
Grand Total	$27,329,000

During the year the trustees received a total income of $1,455,651.44 for general purposes—in addition to $53,836.46 from the endowment of the Division of Educational Enquiry—$755,651.41 from the general endowment, and $700,000.03 from the Carnegie Corporation of New York on account of its appropriations of $200,000 a year for five years and $600,000 a year for ten years. All of the former appropriation, of $1,000,000 for Reserve Fund Number Two,[2] has now been paid in. The details of the employment and investment of all of these receipts and of the sale of sundry securities and the investment of their proceeds in equally sound but more remunerative securities with more convenient maturities will be found in the report of the treasurer. In general these operations resulted in a cash profit of $65,785.04, an advance in yield from 4.76 per cent to 5.76 per cent, and an increase in future aggregate income of approximately $1,000,000.

[1] "For the liquidation of pension obligations accruing subsequent to January 1, 1928."

[2] "To provide assistance in institutions hereafter admitted to association with the Foundation, either in the form of retiring allowances to old and distinguished teachers or in assisting such colleges to inaugurate the contributory plan."

[3] "For such purposes as the trustees and the executive committee may direct."

Current expenditures have been as follows:

(*a*) General Endowment		
Retiring Allowances and Pensions in Institutions on Associated List		
Officers and Teachers	$768,704.80[1]	
Widows	212,386.32[2]	$981,091.12
Retiring Allowances and Pensions granted to Individuals		
Officers and Teachers	$66,749.74[3]	
Widows	31,253.99	98,003.73
Total Retiring Allowances		$1,079,094.85
Expenses of Administration	$72,177.33	
Publication	5,400.00	
Total		77,577.33
(*b*) Division of Educational Enquiry		
General	$8,365.71	
Study of Legal Education	9,059.88	
Study of the Training of Teachers	3,968.43	
Study of Dental Education	2,700.00	
Study of Intercollegiate Athletics	438.40	
Study of Education in the Maritime Provinces	575.01	
Total		25,107.43
Grand Total		$1,181,779.61

MEETING OF THE TRUSTEES

THE seventeenth annual meeting of the trustees was held on November 15, 1922, twenty-two members being present.

In the annual election the following officers were chosen: Chancellor Kirkland, chairman; President Murray, vice-chairman; and President Plantz, secretary. Mr. Franks and Mr. Vanderlip were elected to succeed themselves as members of the executive committee.

The vacancy on the board created by the resignation of President Thwing was filled by the election of President Rush Rhees of the University of Rochester.

Concerning the status of teachers of engineering, the trustees concurred in the recommendation of the executive committee, that Rule 6, restricting retiring allowances in the professional departments of universities to those whose principal work is teaching, should remain unmodified, but that it should be applied by the executive committee to teachers of engineering only after consultation in each case with the authorities of the institution affected.

[1] Including $12,060 from Reserve Fund Number Two.
[2] Including $660 from Reserve Fund Number Two.
[3] Including $600 from Reserve Fund Number Two.

Various changes in the rules for the granting of retiring allowances and pensions, as recommended by the executive committee, the president, and the actuaries, were adopted unanimously and ordered to be printed for distribution among the associated institutions.

The trustees approved the action of the executive committee in aiding the Southern Association of Colleges and Preparatory Schools in a Study of Intercollegiate Athletics.

PROCEEDINGS OF THE EXECUTIVE COMMITTEE

THE executive committee met three times during the year, in November, December, and May. Full records of these meetings, the ninety-fourth to the ninety-sixth, inclusive, with detailed reports of the financial operations approved by the committee, were mailed to the trustees after each meeting. The retiring allowances and pensions voted by the committee during the year are given in full on the later pages of this report.

The list of institutions associated with the Foundation was not increased during the year.

In considering the administration of the present rules the committee determined again that the rules in force at any time must be administered strictly. Should they in any way appear ill-adapted to the interests of the whole body of teachers the committee will consider and recommend possible improvements. It would be, however, a source of general dissatisfaction to administer existing rules with other than the most minute fidelity to their letter and spirit.

The committee learned of the gratifying reception of Bulletin Number Sixteen—*Higher Education in the Maritime Provinces of Canada*—and was informed, from time to time, of the progress of a study of Dental Education, and of further studies in Legal Education. Following a survey by the secretary of the Foundation of the operations of the College Entrance Examination Board, the executive committee authorized the preparation of a bibliography and synopsis of the literature relating to written examinations.

The committee regretted that, because of studies already under way, it could not recommend early action upon requests for studies of medical sects, intercollegiate athletics, the teaching of journalism, and pharmacy.

ALLOWANCES GRANTED DURING THE YEAR

1. IN INSTITUTIONS ON THE ASSOCIATED LIST

ON THE BASIS OF AGE

Institution	*Name*	*Academic Title*	*Date Effective*
UNIVERSITY OF CALIFORNIA	CHARLES MILLS GAYLEY	Professor of the English Language and Literature	*July* 1, 1923
	RULIFF STEPHEN HOLWAY	Professor of Physical Geography	*July* 1, 1923
	WILLIAM CAREY JONES	Professor of Jurisprudence, and Dean of the School of Jurisprudence	*July* 1, 1923
CARNEGIE INSTITUTE	JOHN WESLEY BEATTY	Director of Fine Arts	*July* 1, 1922
	WILLIAM JACOB HOLLAND	Director of Carnegie Museum	*July* 1, 1922
COLUMBIA UNIVERSITY	JOHN BATES CLARK	Professor of Political Economy	*July* 1, 1923
CORNELL UNIVERSITY	HIRAM SAMUEL GUTSELL	Assistant Professor of Freehand Drawing	*June* 21, 1922
	ANDREW CURTIS WHITE	Assistant Librarian	*July* 1, 1923
HARVARD UNIVERSITY	ROLAND THAXTER	Professor of Cryptogamic Botany	*Aug.* 28, 1923
	JOHN ELIOT WOLFF	Professor of Petrography and Mineralogy	*Sept.* 1, 1923
UNIVERSITY OF MICHIGAN	MORITZ LEVI	Professor of French	*July* 1, 1923
	WARREN PLIMPTON LOMBARD	Professor of Physiology	*July* 1, 1923
	FREDERICK CHARLES NEWCOMBE	Professor of Botany and Director of Botanical Laboratory	*July* 1, 1923
	FILIBERT ROTH	Professor of Forestry	*July* 1, 1923
UNIVERSITY OF MISSOURI	JOHN CARLETON JONES	President	*July* 1, 1923
MOUNT HOLYOKE COLLEGE	HELEN CURRIER FLINT	Associate Professor of Greek	*June* 12, 1923
UNIVERSITY OF PITTSBURGH	SAMUEL BLACK MCCORMICK	Chancellor	*May* 6, 1923
PRINCETON UNIVERSITY	HERBERT STEARNS SQUIER SMITH	Professor of Engineering	*July* 1, 1922
	WILLIAM LIBBEY	Professor of Physical Geography	*July* 1, 1922
ROSE POLYTECHNIC INSTITUTE	GARRETT LOGAN	Instructor in Shop Training	*July* 1, 1922
SMITH COLLEGE	ELEANOR PHILBROOK CUSHING	Professor of Mathematics	*July* 1, 1922
STANFORD UNIVERSITY	CHARLES DAVID MARX	Professor of Civil Engineering	*Sept.* 1, 1923
UNIVERSITY OF TORONTO	ADAM CARRUTHERS	Professor of Greek Literature and Archaeology	*July* 1, 1923
	JAMES MAVOR	Professor of Political Economy	*July* 1, 1923
VASSAR COLLEGE	ELLA MCCALEB	Dean of the College	*July* 1, 1923
UNIVERSITY OF VERMONT	SAMUEL FRANKLIN EMERSON	Professor of History and Sociology	*Sept.* 1, 1923
WABASH COLLEGE	JAMES HARVEY OSBORNE	Associate Professor of Mathematics	*Sept.* 1, 1922
WELLESLEY COLLEGE	MALVINA BENNETT	Professor of Reading and Speaking	*June* 19, 1923
WELLS COLLEGE	ANNA ADAMS PIUTTI	Professor of Physiology and Hygiene, and Dean	*June* 12, 1923
WILLIAMS COLLEGE	GARRETT DROPPERS	Professor of Political Economy	*Apr.* 12, 1926
YALE UNIVERSITY	LESTER PAIGE BRECKENRIDGE	Professor of Mechanical Engineering	*July* 1, 1923
	RUSSELL HENRY CHITTENDEN	Professor of Physical Chemistry, and Dean of Sheffield Scientific School	*July* 1, 1922
	HENRY ROSEMAN LANG	Professor of Romance Languages	*July* 1, 1922
	HORATIO MCLEOD REYNOLDS	Professor of Greek	*July* 1, 1922
	CHARLES SCHUCHERT	Professor of Paleontology	*July* 3, 1923
	ELIAS HERSHEY SNEATH	Professor of Philosophy of Religion	*July* 1, 1923
	HORACE LEMUEL WELLS	Professor of Analytical Chemistry	*July* 1, 1923

ON THE BASIS OF DISABILITY

Institution	*Name*	*Academic Title*	*Date Effective*
DRAKE UNIVERSITY	FREDERICK OWEN NORTON	Dean of College of Liberal Arts	*Sept.* 1, 1922[1]
PRINCETON UNIVERSITY	MAX FRIEDRICH BLAU	Professor of German	*May* 4, 1923
PURDUE UNIVERSITY	HERMAN BABSON	Professor of Modern Languages	*Jan.* 1, 1923
UNIVERSITY OF TORONTO	HUGH HORNBY LANGTON	Librarian	*July* 1, 1923
TULANE UNIVERSITY	WILLIAM WOODWARD	Professor of Drawing and Painting	*Oct.* 1, 1922
VASSAR COLLEGE	JOHN LEVERETT MOORE	Professor of Latin	*July* 1, 1923
WELLESLEY COLLEGE	MARGARETHE MUELLER	Professor of German	*May* 4, 1923

WIDOWS' PENSIONS

Institution	*Name*	*Husband's Title*	*Date Effective*
BOWDOIN COLLEGE	ELLEN ELIZA WOODRUFF	Professor of Greek	*Nov.* 20, 1922
UNIVERSITY OF CALIFORNIA	MARY STANLEY BOONE	Professor of Education	*May* 9, 1923
COLUMBIA UNIVERSITY	ELEANOR PEARSON DOW	Professor of Fine Arts	*July* 1, 1923
	FANNIE GAY HOWE	Professor of Metallurgy	*June* 14, 1922
	SARA BOWLES SMITH	Professor of Chemistry	*Oct.* 10, 1922
CORNELL UNIVERSITY	KATHERINE CRANE MCMAHON	Professor of Mathematics	*July* 2, 1922
DARTMOUTH COLLEGE	CAROLINE FLAGG EMERSON	Dean of the College	*Jan.* 1, 1923
DICKINSON COLLEGE	LAURA LINDSAY	Professor of Chemistry	*June* 6, 1922
HARVARD UNIVERSITY	ELLEN LUNT ERNST	Professor of Bacteriology	*Oct.* 8, 1922
	HENRIETTA JUEL GOODALE	Professor of Botany	*May* 13, 1923
	ANNIE DOWNING WILLSON	Professor of Astronomy	*Dec.* 2, 1922
UNIVERSITY OF MISSOURI	PRISCILLA ARMISTEAD ALLEN	Professor of English Language and Literature	*Oct.* 23, 1922
	SALLIE MCCONATHY MCALESTER	Professor of Surgery	*Dec.* 3, 1922
OBERLIN COLLEGE	MARY SWIFT ANDEREGG	Professor of Mathematics	*Nov.* 9, 1922
	BERTHA HOPKINS LEONARD	Professor of Hygiene and Physical Education	*Dec.* 10, 1923
UNIVERSITY OF TORONTO	OLIVIA REYNOLDS FERNOW	Professor of Forestry, and Dean of the Faculty of Forestry	*Mar.* 10, 1923
	AGNES KATHLEEN MACKENZIE	Professor of Bacteriology	*Aug.* 3, 1922
TULANE UNIVERSITY	MARY PALMER CALDWELL	Professor of Chemistry and Geology	*Feb.* 2, 1923
WABASH COLLEGE	HARRIET CHASE MILFORD	Professor of English Language and Literature	*May* 28, 1922
WASHINGTON UNIVERSITY	JENNIE KEYSOR	Professor of Law	*Sept.* 17, 1922
UNIVERSITY OF WISCONSIN	HELEN ALFREDA FLINT	Astronomer	*Mar.* 25, 1923
YALE UNIVERSITY	GRACE ROBBINS LEWIS	Professor of English Literature	*June* 1, 1923
	MARIANNE HELEN GAINES SANDERSON	Assistant Professor of French	*Dec.* 7, 1922

[1] Postponed.

2. IN RECENTLY ASSOCIATED INSTITUTIONS

ON THE BASIS OF AGE

Institution	*Name*	*Academic Title*	*Date Effective*
UNIVERSITY OF ALABAMA	THOMAS CHALMERS MCCORVEY	Professor of History	*July* 1, 1923
FISK UNIVERSITY	HELEN ADELAIDE WALKER	Professor of Home Economics	*June* 7, 1922
GOUCHER COLLEGE	LILIAN WELSH	Professor of Physiology and Hygiene	*June* 1, 1924

3. IN INSTITUTIONS NOT ON THE ASSOCIATED LIST

ON THE BASIS OF AGE

Institution	*Name*	*Academic Title*	*Date Effective*
ST. JOHN'S COLLEGE	BENJAMIN HARRISON WADDELL	Professor of Mathematics	*July* 1, 1923
UNIVERSITY OF UTAH	JOSEPH THOMAS KINGSBURY	President	*July* 1, 1923

ON THE BASIS OF DISABILITY

ATLANTA UNIVERSITY	EDWARD TWICHELL WARE	President	*July* 1, 1923

WIDOW'S PENSION

Institution	*Name*	*Husband's Title*	*Date Effective*
UNIVERSITY OF COLORADO	LOTTIE ROLFE BRACKETT	Professor of Comparative and English Literature	*Aug.* 9, 1922

FINANCIAL DATA CONCERNING ALLOWANCES BECOMING OPERATIVE DURING THE FISCAL YEAR

JULY 1, 1922, TO JUNE 30, 1923

PARTICIPANTS	*Number of Allowances*	*Average Age at Date of Retirement*	*Average Length of Service*	*Number of Deaths during Year*	*Average Amount of Allowance*	TOTAL BECOMING OPERATIVE DURING THE YEAR
PROFESSORS AND OFFICERS IN INSTITUTIONS ON THE ASSOCIATED LIST	41	66.83	31.78	26	$2,409.14	$98,775.00
PROFESSORS AND OFFICERS IN INSTITUTIONS NOT ON THE ASSOCIATED LIST	1	70	36	8	2,000.00	2,000.00
WIDOWS OF PROFESSORS AND OFFICERS IN INSTITUTIONS ON THE ASSOCIATED LIST	20			9	1,072.50	21,450.00
WIDOWS OF PROFESSORS AND OFFICERS IN INSTITUTIONS NOT ON THE ASSOCIATED LIST	1			1	750.00	750.00
TOTAL	63			44	GENERAL AVERAGE OF RETIRING ALLOWANCES $1,951.98	122,975.00

ALLOWANCES NOW IN FORCE

Financial Summary on June 30, 1923

Recipients	Number of Allowances in Force				Average Age at Date of Retirement			Average Length of Service			Average Amount of Allowance			Total Grant in Force June 30, 1923
	On basis of age	*On basis of service*	*On basis of disability*	*Total*	*Retired on basis of age*	*On basis of service*	*On basis of disability*	*On basis of age*	*On basis of service*	*On basis of disability*	*On basis of age*	*On basis of service*	*On basis of disability*	
Professors and Officers in Institutions on the Associated List	310	25	26	361	67.25	60.92	57.23	33.07	30.96	29.03	$2,195.33	$1,611.40	$1,413.65	$757,595
Professors and Officers in Institutions not on the Associated List	31	12	1	44	69.93	61.08	64	32.22	33.41	32	1,417.90	1,422.50	720.00	61,745
Widows of Professors and Officers in Institutions on the Associated List				216							$1,001.06			216,230
Widows of Professors and Officers in Institutions not on the Associated List				40							754.50			30,180
Total				661							General Average of Retiring Allowances $1,612.32			1,065,750

TOTAL NUMBER OF ALLOWANCES OPERATIVE

Year	Institutions	*Age*	*Service*	*Permanent Disability*	*Temporary Grants*	*Widows*	*Total*	Deduct		*Net Increase*	*Allowances & Pensions in Force at End of Year*
								For Deaths	*For Discontinuances*		
1906[1]	Associated Institutions	29	13	2	2	6	52			52	
	Non-Associated Institutions	8	4		3		15	1		14 66	66
1906-7	Associated Institutions	35	16	2	3	7	63	10	3	50	
	Non-Associated Institutions	20	12	1	2	4	39	7	1	31 81	147
1907-8	Associated Institutions	19	17	1	3	12	52	10	1	41	
	Non-Associated Institutions	8	9		1	6	24	2	1	21 62	209
1908-9	Associated Institutions	34	17	1	9	10	71	6	4	61	
	Non-Associated Institutions	13	9	3	4	2	31	3	2	26 87	296
1909-10	Associated Institutions	28	7	3	6	14	58	11	10	37	
	Non-Associated Institutions	11	3	1	2	5	22	8	5	9 46	342
1910-11	Associated Institutions	26	2	5	4	7	44	15	6	23	
	Non-Associated Institutions	3	1	3		4	11	4	3	4 27	369
1911-12	Associated Institutions	25		4	3	11	43	9	4	30	
	Non-Associated Institutions	2	1			4	7	9		2[2] 28	397
1912-13	Associated Institutions	25	1	2		7	35	15	2	18	
	Non-Associated Institutions	1				2	3	12		9[2] 9	406
1913-14	Associated Institutions	22		2		12	36	12		24	
	Non-Associated Institutions	4		1		3	8	4		4 28	434
1914-15	Associated Institutions	19		1		14	34	21		13	
	Non-Associated Institutions	1				3	4	6		2[2] 11	445
1915-16	Associated Institutions	31		2		13	46	27		19	
	Non-Associated Institutions					4	4	4		0 19	464
1916-17[3]	Associated Institutions	8		2		21	31	13		18	
	Non-Associated Institutions			2		1	3	5		2[2] 16	480
1917-18	Associated Institutions	33		5		17	55	24		31	
	Non-Associated Institutions	2				5	7	8		1[2] 30	510
1918-19	Associated Institutions	18		4		26	48	27		21	
	Non-Associated Institutions	2				4	6	7		1[2] 20	530
1919-20	Associated Institutions	32		1		16	49	26		23	
	Non-Associated Institutions	3				5	8	6		2 25	555
1920-21	Associated Institutions	48		2		30	80	27		53	
	Non-Associated Institutions	5				5	10	9		1 54	609
1921-22	Associated Institutions	38		1		21	60	25		35	
	Non-Associated Institutions	2				1	3	5		2[2] 33	642
1922-23	Associated Institutions	37		4		20	61	35		26	
	Non-Associated Institutions	1				1	2	9		7[2] 19	661
	Totals	593	112	55	42	323	1,125	422	42		661

[1] July 1 to September 30. [2] Decrease. [3] October 1 to June 30.

TOTAL COST OF RETIRING ALLOWANCES AND PENSIONS

Institution	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13	1913
Allegheny College	.....	.....	.....	.....	.....	.....	.....	.....
Amherst College	$3,696.66	$7,591.25	$9,050.00	$9,050.00	$8,621.64	$9,232.50	$8,820.00	$9,33
Bates College	333.37	1,890.01	2,855.00	3,855.00	2,755.00	2,755.00	2,755.00	2,75
Beloit College	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,366.19	3,28
Bowdoin College	.....	1,025.00	1,880.00	2,125.00	2,615.00	2,615.00	2,915.00	3,81
Carleton College	1,000.00	2,598.75	5,245.00	5,545.00	6,445.00	6,445.00	6,445.00	6,44
Carnegie Institute of Pittsburgh	.....	.....	.....	.....	.....	.....	.....	.....
Carnegie Institution of Washington	.....	.....	.....	.....	.....	.....	.....	.....
Case School of Applied Science	.....	1,787.50	1,650.00	1,650.00	1,781.66	3,230.00	3,230.00	3,23
Central University of Kentucky	.....	1,837.50	4,705.40	4,655.00	4,655.00	4,665.00	4,655.00	4,6
Clark University	.....	.....	1,800.00	1,800.00	.....	.....	.....	.....
Clarkson School of Technology	.....	.....	.....	.....	.....	.....	.....	.....
Coe College	.....	.....	583.33	1,512.50	1,556.75	2,140.00	2,140.00	2,14
Colorado College	.....	783.75	1,450.83	1,505.00	1,505.00	1,505.00	1,505.00	1,5
Columbia University	4,792.51	10,655.83	17,726.67	28,472.47	28,219.97	30,219.94	32,757.50	30,9
Cornell College	.....	.....	.....	.....	.....	.....	.....	.....
Cornell University	11,642.52	13,631.56	17,382.44	21,067.98	25,314.22	25,707.23	25,029.99	28,9
Dalhousie College	1,260.00	1,260.00	1,260.00	1,260.00	1,260.00	3,630.00	3,630.00	4,0
Dartmouth College	.....	160.83	1,930.00	2,685.06	5,950.00	10,150.00	9,743.72	8,1
Dickinson College	.....	.....	.....	313.94	1,986.23	4,625.00	5,083.33	6,0
Drake University	.....	853.36	1,280.00	1,280.00	2,373.75	3,380.00	3,380.00	2,2
Drury College	.....	643.95	2,065.00	2,065.00	2,065.00	2,065.00	2,065.00	2,0
Fisk University	.....	.....	.....	.....	.....	.....	.....	.....
Franklin College of Indiana	.....	80.83	1,289.58	2,888.33	3,805.00	4,062.50	4,835.00	4,8
Goucher College	.....	.....	.....	.....	.....	.....	.....	.....
Grinnell College	1,000.00	1,000.00	333.36	1,000.00	1,000.00	1,362.50	2,450.00	2,4
Hamilton College	260.00	.....	.....	.....	.....	.....	.....	.....
Harvard University	5,426.68	14,827.50	18,938.08	34,080.53	38,753.36	45,355.82	52,430.00	54,9
Hobart College	325.00	1,300.00	1,525.00	2,200.00	2,169.69	2,909.97	2,910.00	2,9
Indiana University	.....	.....	.....	.....	.....	241.74	845.00	8
Johns Hopkins University	1,200.00	1,200.00	2,250.00	2,737.50	4,883.33	7,550.00	6,703.49	9,8
Knox College	475.00	950.00	1,520.00	1,139.99	950.00	1,330.44	2,230.00	2,2
Lawrence College	500.00	500.00	500.00	500.00	500.00	239.12	277.08	9
Lehigh University	2,068.76	2,881.66	3,425.00	3,425.00	3,425.00	3,425.00	4,453.54	5,0
Marietta College	441.67	1,060.00	1,060.00	1,335.06	2,160.00	2,160.00	1,960.23	1,6
Massachusetts Institute of Technology	.....	1,200.00	1,200.00	2,902.56	4,560.00	8,360.00	8,835.00	14,5
McGill University	158.33	2,670.83	2,980.00	7,925.02	10,410.58	10,448.52	9,435.00	9,4
Middlebury College	.....	437.50	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,7
Mount Holyoke College	.....	1,123.17	1,730.00	1,730.00	1,730.00	2,000.98	2,625.00	2,6
New York University	836.65	.....	1,186.67	2,630.00	5,180.00	5,180.00	5,180.00	5,4
Oberlin College	305.00	4,900.00	4,570.00	4,420.67	3,250.00	3,368.33	4,670.00	4,6
Polytechnic Institute of Brooklyn	1,212.50	4,850.00	4,850.00	4,150.00	4,150.00	4,150.00	4,150.00	4,1
Princeton University	6,150.00	5,974.58	7,165.00	7,614.52	11,255.27	10,547.26	10,653.71	11,7
Purdue University	.....	.....	.....	250.00	1,000.00	1,000.00	1,300.00	2,4
Queen's University	.....	.....	.....	.....	.....	.....	.....	.....
Radcliffe College	.....	.....	258.33	5,700.01	5,500.00	5,500.00	5,500.00	5,5
Rensselaer Polytechnic Institute	.....	.....	.....	.....	.....	.....	.....	.....
Ripon College	2,000.00	2,000.00	2,000.00	1,745.85	1,500.00	1,080.54	500.00	5
Rose Polytechnic Institute	.....	.....	780.00	1,040.00	1,040.00	1,040.00	1,040.00	1,0
Smith College	400.00	.....	887.50	4,733.27	5,248.33	6,902.22	8,330.00	8,3
Stanford University	1,615.01	1,180.42	169.16	366.67	3,300.24	2,200.00	2,200.00	2,2
Stevens Institute of Technology	4,608.27	8,375.00	11,075.00	9,115.00	9,279.58	10,511.85	10,015.00	10,0
Swarthmore College	.....	.....	1,900.00	4,212.50	4,350.00	4,350.00	4,350.00	4,7
Trinity College	1,200.00	1,200.00	1,200.00	1,200.00	1,457.53	2,230.00	2,230.00	2,2
Tufts College	2,262.50	3,035.83	3,300.00	2,624.87	2,320.00	2,320.00	2,320.00	2,3
Tulane University of Louisiana	2,677.33	10,651.66	14,238.33	15,640.00	14,531.64	11,640.00	11,640.00	12,2
Union University	1,450.00	1,450.00	725.00	725.00	1,559.25	1,405.00	1,405.00	1,4
University of California	.....	.....	.....	3,686.80	12,472.53	15,585.00	14,954.68	15,7
University of Cincinnati	.....	1,103.76	4,331.66	5,498.28	4,665.00	3,665.00	3,665.00	3,6
University of Michigan	.....	.....	536.67	3,610.00	5,480.00	10,867.58	12,420.00	12,4
University of Minnesota	.....	.....	1,340.00	4,705.00	6,717.50	12,200.25	16,785.00	19,0
University of Missouri	.....	.....	.....	7,057.08	10,914.13	9,585.00	9,585.00	9,5
University of Pennsylvania	.....	.....	1,175.00	3,175.00	4,265.00	5,350.83	11,645.00	11,2
University of Pittsburgh	.....	425.01	1,962.50	2,750.00	2,750.00	3,212.56	4,600.00	4,6
University of Rochester	.....	930.00	3,720.00	3,720.00	3,720.00	3,720.00	3,182.34	2,7
University of Toronto	.....	.....	.....	.....	.....	.....	1,862.50	4,5
University of Vermont	.....	1,600.00	1,400.00	1,400.00	2,386.26	2,715.00	2,715.00	2,8
University of Virginia	.....	.....	.....	.....	3,060.08	9,350.82	13,114.60	13,1
University of Wisconsin	.....	.....	1,913.75	8,130.00	9,185.53	8,605.00	8,377.74	9,7
Vassar College	168.75	2,025.00	2,025.00	2,025.00	4,067.08	4,072.50	6,360.06	10,1
Wabash College	.....	.....	.....	.....	885.01	1,180.00	1,180.00	2,3
Washington University	900.00	3,900.00	3,900.00	4,820.89	6,860.00	7,435.00	9,160.00	8,2
Washington and Jefferson College	3,151.26	3,005.00	3,005.00	2,648.30	3,361.67	1,935.00	1,777.23	2,7
Washington and Lee University	.....	.....	.....	.....	.....	.....	.....	.....
Wellesley College	.....	157.50	630.00	1,005.00	2,923.17	2,620.00	2,550.01	2,3
Wells College	1,460.00	3,260.00	3,461.25	4,065.00	4,065.00	4,065.00	4,065.00	4,0
Wesleyan University	.....	.....	.....	1,281.32	3,075.00	3,075.00	3,075.00	3,0
Western Reserve University	3,225.00	3,225.00	3,225.00	3,225.00	3,225.00	3,225.00	3,439.67	4,3
Whitman College	.....	.....	.....	.....	.....	.....	.....	.....
Williams College	.....	.....	1,325.00	5,300.00	5,775.03	7,200.00	6,812.03	6,5
Worcester Polytechnic Institute	.....	455.00	1,820.00	1,820.00	1,820.00	1,820.00	1,820.00	1,8
Yale University	14,960.00	20,533.75	27,523.75	34,652.05	36,823.32	41,523.64	42,097.50	46,8
Totals	$85,163.77	$160,188.29	$228,964.26	$325,199.02	$388,619.33	$441,984.64	$478,987.14	$514,4
Non-Associated Institutions	73,726.50	86,454.12	114,906.64	144,635.28	138,259.67	128,438.39	121,402.87	120.3
Grand Total	$158,890.27	$246,642.41	$343,870.90	$469,834.30	$526,879.00	$570,423.03	$600,390.01	$634,8

N THE ASSOCIATED AND NON-ASSOCIATED INSTITUTIONS

	1914-15	1915-16	*Nine months ending June 30, 1916-17*	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	*Total*
..	.....	.....	.....	.....	.....	.....	$3,550.00	$3,550.00	$3,550.00	$10,650.00
0	$14,370.00	$13,308.55	$8,804.82	$16,411.43	$16,447.55	$15,157.43	15,493.42	13,585.00	11,335.00	190,307.75
0	2,755.00	2,755.00	2,066.13	3,159.49	2,264.00	1,595.00	1,595.00	1,595.00	1,595.00	39,333.00
0	3,280.00	3,280.00	2,323.77	4,455.98	3,515.69	4,830.00	4,830.00	6,665.00	6,665.00	57,491.63
0	3,921.44	4,254.87	2,943.63	5,369.35	5,655.00	5,655.00	5,655.00	5,558.59	4,722.50	60,725.38
0	6,444.90	5,781.09	4,083.57	5,445.18	5,445.00	5,445.00	5,445.00	5,445.00	5,445.00	89,148.49
..	.....	.....	.....	.....	.....	.....	.....	.....	8,000.00	8,000.00
..	.....	.....	.....	.....	.....	.....	2,000.00	4,000.00	4,475.00	10,475.00
0	3,230.00	3,230.00	2,422.44	3,133.24	2,452.46	2,405.00	2,405.00	2,405.00	2,405.00	40,647.30
0	3,797.50	3,237.34	1,807.80	2,545.12	2,250.40	1,732.24	1,548.00	1,433.28	.....	48,169.58
..	.....	.....	.....	.....	.....	.....	2,616.05	5,400.00	5,800.00	17,416.05
..	.....	.....	.....	1,140.00	1,140.00	1,140.00	1,140.00	1,140.00	1,140.00	6,840.00
0	2,140.00	2,140.00	1,604.88	2,140.12	2,140.00	1,558.52	1,310.00	824.00	500.00	24,430.10
0	1,505.00	1,505.00	1,409.94	6,454.50	8,055.00	8,055.00	8,612.82	8,850.00	8,850.00	63,056.84
8	32,070.09	35,431.03	37,436.18	57,110.34	59,569.27	58,847.26	61,676.15	66,673.66	73,434.05	666,070.40
..	.....	.....	.....	.....	.....	.....	.....	.....	2,900.00	2,900.00
0	34,105.78	33,356.13	25,176.78	33,691.80	31,646.84	38,059.58	42,563.71	53,404.33	58,197.70	518,967.69
5	5,505.00	5,505.00	4,138.75	5,505.00	5,505.00	5,505.00	4,393.20	4,320.00	4,320.00	62,355.70
0	9,118.15	9,205.00	9,557.34	11,721.80	15,740.00	17,635.85	19,220.00	19,220.00	18,122.10	168,259.85
0	6,000.00	6,000.00	5,009.94	6,625.21	6,625.00	6,625.00	6,765.41	7,185.28	6,720.00	75,564.34
8	2,100.00	2,485.80	2,557.44	3,410.06	6,180.00	6,180.00	5,930.15	5,655.00	5,655.00	54,921.44
0	2,065.00	2,065.00	1,548.72	2,835.03	3,805.00	3,805.00	4,805.00	5,005.00	5,005.00	43,972.70
..	.....	.....	.....	.....	.....	.....	.....	1,200.00	1,885.00	3,085.00
0	4,835.00	5,818.36	4,732.29	6,310.21	6,310.00	2,629.05	.....	.....	.....	52,431.15
..	.....	.....	.....	.....	.....	.....	.....	.....	1,810.00	1,810.00
0	2,450.00	2,450.00	1,837.44	2,391.32	1,450.00	2,247.70	2,185.00	2,185.00	2,185.00	29,977.32
..	.....	.....	.....	3,160.02	3,150.00	3,150.00	3,150.00	3,150.00	3,150.00	19,170.02
3	58,745.27	58,259.74	48,331.92	63,076.74	62,967.25	69,228.30	80,040.36	82,441.48	87,009.90	874,906.96
0	2,910.00	2 911.00	2,444.98	3,560.11	5,460.00	5,460.00	5,460.00	5,075.24	5,010.00	54,540.99
0	845.00	945.00	633.69	935.06	3,983.00	4,170.00	6,250.80	6,440.00	6,440.00	32,474.29
6	11,350.00	15,891.66	13,499.64	18,764.69	19,105.68	18,375.00	20,162.13	19,247.30	17,950.00	190,770.38
0	2,230.00	2,230.00	1,763.28	3,980.12	4,330.00	4,330.00	4,330.00	4,330.00	4,330.00	42,678.83
0	950.00	950.10	712.44	950.04	2,034.77	2,690.00	2,737.55	3,830.00	3,830.00	22,651.10
0	5,025.00	5,025.00	3,768.66	5,025.09	6,075.00	6,285.00	8,285.00	10,955.80	12,267.36	90,840.87
0	1,610.00	1,840.33	2,594.97	3,460.03	3,460.00	3,460.00	3,460.00	3,460.00	3,460.00	38,592.29
8	18,083.96	19,943.70	16,623.74	24,696.96	24,488.79	23,416.85	26,191.06	30,078.17	33,435.44	258,576.21
0	9,053.29	8,737.69	6,554.88	8,552.39	9,496.66	12,830.00	14,684.41	13,500.00	13,407.00	150,279.60
0	1,750.00	1,750.00	1,312.47	1,750.02	1,750.00	2,619.94	4,354.56	4,500.00	4,500.00	35,224.49
0	2,625.00	3,001.80	2,928.60	3,905.15	3,905.00	3,905.00	3,974.76	5,553.48	6,734.02	50,096.96
0	8,905.00	9,089.58	8,339.85	11,120.15	10,379.94	11,211.60	11,570.00	11,570.00	11,570.00	119,439.85
0	4,670.00	4,670.00	5,531.64	7,105.06	9,079.90	9,997.90	12,230.47	13,318.30	14,939.30	111,696.57
0	4,150.00	4,150.00	3,112.38	5,381.41	5,374.44	3,446.91	2,295.00	2,295.00	2,295.00	64,162.64
1	13,103.75	11,560.00	8,483.45	10,460.24	12,360.00	12,113.02	11,510.00	11,510.00	15,736.40	177,899.70
0	3,483.33	4,950.00	3,767.53	7,786.40	7,353.03	4,579.09	4,210.00	6,335.00	10,015.00	58,516.91
.....	.....	.....	.....	.....	.....	1,350.00	5,570.84	8,325.00	10,470.00	25,715.84
0	3,733.33	3,100.00	2,324.97	3,100.03	3,100.00	3,100.00	3,100.00	3,100.00	3,100.00	55,716.67
.....	.....	706.66	1,800.00	2,400.00	2,264.50	1,200.00	1,200.00	1,200.00	1,200.00	11,971.16
0	693.75	1,274.20	955.53	1,275.51	1,275.00	1,275.00	1,275.00	2,655.00	2,655.00	24,660.38
0	1,040.00	1,040.00	779.74	1,040.06	1,040.00	3,206.68	7,223.30	7,940.00	8,758.81	38,048.59
0	8,330.00	8,330.00	6,247.35	8,330.15	8,330.00	8,899.27	9,046.36	11,220.00	13,675.00	117,239.45
0	2,200.00	6,528.33	10,627.38	18,982.62	19,420.00	21,461.60	21,870.00	22,503.26	23,505.00	160,329.69
0	9,594.32	7,199.56	5,069.88	5,694.67	6,518.30	6,685.00	6,685.00	6,685.00	6,208.62	133,335.05
0	6,070.00	6,070.00	4,552.38	6,070.12	6,070.00	6,070.00	5,578.36	4,759.28	10,455.00	79,637.67
0	2,230.00	2,230.00	1,672.47	2,230.03	2,230.00	5,630.00	7,380.00	7,380.00	7,380.00	51,310.03
0	2,320.00	1,972.05	1,074.94	1,700.06	1,700.00	1,243.74	450.00	450.00	450.00	31,863.99
0	12,585.00	15,818.33	11,528.46	13,949.62	17,607.50	22,919.91	24,270.00	23,078.27	23,983.37	258,991.05
0	1,405.00	1,353.65	506.94	4,121.82	4,280.00	4,280.00	4,280.00	6,076.63	7,294.15	43,722.44
0	19,041.68	21,030.00	15,178.33	21,994.46	24,404.89	27,457.00	31,415.00	33,140.00	32,872.72	288,963.09
0	3,576.42	2,910.00	2,182.41	2,910.09	2,175.60	2,210.00	5,543.30	6,210.00	5,753.96	60,065.48
0	11,266.25	9,250.70	8,534.22	13,864.82	16,515.00	18,933.64	22,624.61	28,970.37	33,160.00	208,453.86
0	21,121.26	20,620.00	15,464.61	22,545.39	22,720.00	22,550.24	20,723.68	19,471.79	15,689.14	241,660.56
0	10,431.72	11,165.00	8,818.50	14,145.26	14,545.00	15,951.25	18,149.33	15,698.03	14,247.48	169,869.48
0	10,487.49	10,736.20	7,537.32	12,881.95	13,502.25	12,971.26	26,593.67	29,135.00	31,703.35	192,412.90
0	4,949.99	6,000.00	4,609.53	6,800.21	6,790.00	6,266.71	4,937.95	4,115.00	4,727.83	69,497.29
0	2,730.00	2,720.00	2,039.94	3,946.77	3,786.70	3,217.30	6,710.00	6,390.02	5,409.16	58,672.23
0	7,101.40	9,281.80	9,081.55	14,412.05	14,892.83	21,280.00	20,045.99	20,676.63	29,194.21	152,378.96
0	5,383.09	3,753.00	2,620.58	2,815.03	2,343.00	2,315.00	2,315.00	3,310.80	3,510.00	43,424.26
0	11,795.13	12,136.77	9,344.79	13,142.76	13,385.00	16,151.60	16,585.00	16,027.44	15,855.00	163,051.19
0	10,497.50	12,605.05	9,453.33	14,620.22	15,040.51	15,346.75	16,460.00	16,460.00	19,731.75	176,136.69
0	9,975.00	9,975.00	5,882.45	6,965.15	9,506.60	10,015.00	9,004.37	7,050.00	6,119.90	105,378.45
0	2,285.00	2,581.25	2,602.44	3,470.06	3,864.60	4,050.00	4,050.00	3,998.20	4,333.30	36,795.55
0	10,496.74	10,075.65	4,541.63	9,971.92	9,199.26	8,350.00	8,350.00	8,350.00	6,650.20	121,187.37
0	6,195.00	7,143.57	3,546.12	5,855.06	7,655.00	7,655.00	7,139.82	8,465.00	8,465.00	83,723.03
.....	.....	.....	.....	.....	.....	.....	.....	.....	4,100.00	4,100.00
0	1,560.53	1,923.22	4,253.13	5,670.03	5,670.00	6,055.04	10,460.00	10,460.00	10,744.84	69,022.47
0	4,065.00	4,065.00	3,048.57	4,065.18	4,065.00	4,065.00	4,065.00	4,065.00	4,156.30	64,166.30
0	3,075.00	2,542.03	1,678.18	2,850.06	5,212.20	5,125.00	6,275.00	8,361.87	8,300.00	57,000.66
0	4,380.00	4,380.00	3,284.91	4,380.08	6,350.00	6,043.65	6,000.00	8,945.98	10,126.36	81,060.65
.....	.....	.....	.....	.....	.....	.....	752.30	1,460.00	1,460.00	3,672.30
0	6,505.00	6,545.00	7,150.21	11,590.55	10,505.00	10,505.00	9,140.69	8,415.00	8,415.00	111,728.51
0	1,820.00	60.60	.....	.....	.....	.....	.....	477.41	480.00	14,213.01
0	45,998.63	45,504.84	34,245.89	49,539.06	51,168.84	57,058.30	60,819.98	68,172.31	75,954.90	753,472.96
	$554,121.69	$570,241.23	$462,104.66	$680,855.71	$718,082.25	$761,270.18	$844,724.56	$906,087.20	$981,091.12	$9,102,174.63
	120,603.28	116,859.21	85,253.39	118,667.30	110,303.33	114,243.86	111,537.48	112,927.15	98,003.73	1,916,596.39
	$674,724.97	$687,100.44	$547,358.05	$799,523.01	$828,385.58	$875,514.04	$956,262.04	$1,019,014.35	$1,079,094.85	$11,018,771.02

TOTAL EXPENDITURE IN ALLOWANCES

Year	Institutions	*Number of Institutions*	*Number of Retired Teachers on Roll*	*Average Age at Retirement on Basis of Age*	*Amount of Retiring Allowances Paid*	*Number of Widows' Pensions*	*Amount of Widows' Pensions Paid*	*Total Load of Allowances and Pensions*	*Total Amount Paid*
1906[1]	Associated	52	44	71.45	$15,478.53	6	$1,124.97	$77,785	$16,603.50
	Non-Associated	32	12	71.37	6,474.53		124.98	19,100	6,599.51
1906–7	Associated	55	90	71.61	77,574.09	12	8,039.06	152,205	85,613.15
	Non-Associated	48	37	73.45	47,654.11	4	2,420.00	55,700	50,074.11
1907–8	Associated	62	116	71.44	146,140.47	23	14,989.48	215,330	161,129.95
	Non-Associated	59	52	72.39	80,134.26	10	5,378.20	79,515	85,512.46
1908–9	Associated	67	162	69.7	206,472.57	33	24,545.00	320,715	231,017.57
	Non-Associated	62	54	69.8	104,536.66	12	8,316.67	112,770	112,853.33
1909–10	Associated	71	189	69.6	291,403.98	47	33,795.04	385,315	325,199.02
	Non-Associated	77	81	70.6	132,497.51	17	12,137.77	125,970	144,635.28
1910–11	Associated	72	208	69.5	341,899.16	53	46,720.17	420,790	388,619.33
	Non-Associated	77	84	70.1	122,215.10	21	16,044.57	128,145	138,259.67
1911–12	Associated	72	220	69.3	388,338.27	62	53,646.37	473,680	441,984.64
	Non-Associated	68	80	69.7	108,329.55	23	20,045.84	127,800	128,438.39
1912–13	Associated	73	245	69	416,626.37	67	62,360.77	507,420	478,987.14
	Non-Associated	63	71	69.2	102,814.10	23	18,588.77	115,640	121,402.87
1913–14	Associated	73	259	68.7	444,966.52	77	69,523.06	550,420	514,489.58
	Non-Associated	66	72	69.1	99,984.68	26	20,389.51	122,595	120,374.19
1914–15	Associated	73	259	66.9	473,969.38	90	80,152.31	563,335	554,121.69
	Non-Associated	65	68	68	99,850.81	28	20,752.47	117,830	120,603.28
1915–16	Associated	74	272	66.3	479,923.91	94	90,317.32	606,535	570,241.23
	Non-Associated	66	64	71	83,839.91	32	33,019.30	114,695	116,859.21
1916–17[2]	Associated	71	274	67.99	345,213.79	112	116,890.87	469,249[2]	462,104.66
	Non-Associated	64	62	69.23	62,054.05	32	23,199.34	85,271[2]	85,253.39
1917–18	Associated	71	294	67.68	565,892.20	123	114,963.51	684,420	680,855.71
	Non-Associated	66	58	69.61	90,784.61	35	27,882.69	111,305	118,667.30
1918–19	Associated	71	294	67.55	568,382.49	146	149,699.76	713,245	718,082.25
	Non-Associated	66	53	69.70	81,389.66	37	28,913.67	107,035	110,303.33
1919–20	Associated	72	300	67.72	609,366.22	158	151,903.96	757,090	761,270.18
	Non-Associated	67	56	69	81,418.97	41	32,824.89	113,580	114,243.86
1920–21	Associated	75	326	67.12	665,413.57	185	179,310.99	850,205	844,724.56
	Non-Associated	70	53	69.20	77,781.45	45	33,756.03	109,485	111,537.48
1921–22	Associated	78	341	67.17	710,355.42	201	195,731.78	909,835	906,087.20
	Non-Associated	70	55	69.55	78,296.73	45	34,630.42	112,955	112,927.15
1922–23	Associated	80	361	67.25	768,704.80	216	212,386.32	973,825	981,091.12
	Non-Associated	70	44	69.93	66,749.74	40	31,253.99	91,925	98,003.73

[1] July 1 to September 30. [2] October 1 to June 30.

TOTAL LOAD OF ALLOWANCES ASSUMED

Year	Institution	*Age*	*Service*	*Permanent Disability*	*Temporary Grants*	*Widows*	*Total*	Deduct		*Net Increase*		*Annual Load at End of Fiscal Year*
								For Deaths	*For Discontinuances*			
1906[1]	Associated	$40,630	$26,405	$2,465	$2,750	$5,535	$77,785			$77,785		
	Non-Associated	8,200	8,220		4,015		20,435	$1,335		19,100	$96,885	$96,885
1906-7	Associated	52,960	28,455	3,000	3,870	6,165	94,450	16,160	$3,870	$74,420		
	Non-Associated	24,240	14,955	1,100	2,400	2,670	45,365	7,750	1,015	36,600	111,020	207,905
1907-8	Associated	33,280	27,610	1,800	5,000	10,480	78,170	13,375	1,670	$63,125		
	Non-Associated	9,530	12,830		1,500	3,905	27,765	3,350	600	23,815	86,940	294,845
1908-9	Associated	62,930	33,280	1,525	14,340	9,145	121,220	9,755	6,080	$105,385		
	Non-Associated	14,865	14,995	5,065	5,100	1,695	41,720	5,465	3,000	33,255	138,640	433,485
1909-10	Associated	59,950	10,795	4,515	10,080	14,870	100,210	18,270	17,340	$64,600		
	Non-Associated	16,860	4,610	1,500	3,300	5,060	31,330	11,230	6,900	13,200	77,800	511,285
1910-11	Associated	50,096	3,435	6,580	4,800	6,595	71,505	26,950	9,080	$35,475		
	Non-Associated	4,070	1,615	5,070		2,955	13,710	6,735	4,800	2,175	37,650	548,935
1911-12	Associated	51,145		5,455	3,800	11,035	71,435	13,745	4,800	$52,890		
	Non-Associated	5,600	1,200			3,600	10,400	10,745		345[2]	52,545	601,480
1912-13	Associated	51,435	2,655	2,325		5,725	62,140	26,600	1,800	$33,740		
	Non-Associated	1,000				2,000	3,000	15,160		12,160[2]	21,580	623,060
1913-14	Associated	46,510		2,860		13,265	62,635	19,635		$43,000		
	Non-Associated	7,810		1,820		1,650	11,280	4,325		6,955	49,955	673,015
1914-15	Associated	41,350		775		13,050	55,175	42,260		$12,915		
	Non-Associated	2,300				1,865	4,165	8,930		4,765[2]	8,150	681,165
1915-16	Associated	70,400		2,225		12,445	85,070	41,870		$43,200		
	Non-Associated					2,985	2,985	6,120		3,135[2]	40,065	721,230
1916-17[3]	Associated	14,900		2,310		23,055	40,265	21,135		$19,130		
	Non-Associated			3,820		500	4,320	5,320		1,000[2]	18,130	739,360
1917-18	Associated	70,545		9,245		18,360	98,150	39,780		$58,370		
	Non-Associated	4,300				4,705	9,005	11,010		2,005[2]	56,365	795,725
1918-19	Associated	36,140		9,015		26,340	71,495	43,685		$27,810		
	Non-Associated	3,300				2,740	6,040	9,295		3,255[2]	24,555	820,280
1919-20	Associated	70,920		2,000		15,865	88,785	39,315		$49,470		
	Non-Associated	4,625				3,770	8,395	7,475		920	50,390	870,670
1920-21	Associated	111,480		3,915		33,100	148,495	58,905		$89,590		
	Non-Associated	7,130				3,525	10,655	11,225		570[2]	89,020	959,690
1921-22	Associated	89,120		3,770		22,885	115,775	51,845		$63,930		
	Non-Associated	2,600				530	3,130	3,960		830[2]	63,100	1,022,790
1922-23	Associated	92,885		5,890		21,450	120,225	65,265		$54,960		
	Non-Associated	2,000				750	2,750	14,750		12,000[2]	42,960	1,065,750

[1] July 1 to September 30. [2] Decrease. [3] October 1 to June 30.

GEOGRAPHICAL DISTRIBUTION OF ALLOWANCES OPERATIVE

State, Territory, or Province	Number of Allowances granted			Deaths	Number of Allowances in Force
	In Institutions on the Associated List	*In Institutions not on the Associated List*	*Total*		
NORTH ATLANTIC DIVISION					
Maine	15	3	18	14	4
New Hampshire	18	1	19	5	14
Vermont	8		8	4	4
Massachusetts	126	4	130	42	88
Rhode Island		2	2	1	1
Connecticut	90		90	32	58
New York	157	10	167	64	103
New Jersey	29	1	30	12	18
Pennsylvania	66	9	75	33	42
Total	509	30	539	207	332
SOUTH ATLANTIC DIVISION					
Maryland	13	2	15	4	11
District of Columbia	1	8	9	5	4
Virginia	19	12	31	17	14
West Virginia		7	7	2	5
North Carolina		9	9	5	4
South Carolina		7	7	5	2
Georgia		5	5	3	2
Florida	1	5	6	2	4
Total	34	55	89	43	46
SOUTH CENTRAL DIVISION					
Kentucky	10	4	14	8	6
Tennessee	1	10	11	8	3
Alabama		6	6	5	1
Mississippi		6	6	3	3
Louisiana	20		20	5	15
Total	31	26	57	29	28
NORTH CENTRAL DIVISION					
Ohio	39	15	54	19	35
Indiana	31	7	38	11	27
Illinois	3	6	9	5	4
Michigan	32	5	37	15	22
Wisconsin	34		34	11	23
Minnesota	27	1	28	10	18
Iowa	15	11	26	10	16
Missouri	37	3	40	19	21
North Dakota		4	4	4	
South Dakota		1	1		1
Nebraska		1	1	1	
Kansas		4	4	1	3
Total	218	58	276	106	170
WESTERN DIVISION					
Montana		3	3	1	2
Colorado	7	6	13	2	11
California	39	1	40	14	26
Oregon		5	5	3	2
Washington	3		3		3
Total	49	15	64	20	44
THE DOMINION OF CANADA					
Ontario	27	6	33	9	24
Quebec	14		14	4	10
Nova Scotia	4		4	1	3
New Brunswick		3	3	1	2
Prince Edward Island		1	1		1
Total	45	10	55	15	40
NEWFOUNDLAND					
		3	3	2	1
Total		3	3	2	1
Grand Total	886	197	1,083	422	661

PART II

BUSINESS OF THE YEAR

THE ACTIVITIES OF THE FOUNDATION

THE present report is the eighteenth annual report issued by the Carnegie Foundation.

A glance at these eighteen years of institutional activity makes clear that the work of the Foundation has tended to develop along certain lines fixed by experience much in the fashion that all such institutions tend to develop.

At its inception, the Carnegie Foundation concerned itself only with the distribution of the income of an endowment in accordance with the instructions and desires of the founder. From the beginning, however, it was clear that it was impossible to separate this obligation from certain educational considerations and relations. The means employed to deal with this wider conception of its opportunity tended in themselves to modify the processes and purposes of the Foundation.

The process of development which has taken place in these eighteen years has led the trustees of the Foundation to various activities, of which the following are the principal lines:

The question of retiring allowances for college teachers has remained the first and primary problem with which the Foundation has concerned itself. There has been worked out, under expert advice, an agency for dealing with this problem upon sound and enduring principles. That agency—the Teachers Insurance and Annuity Association of America—has already passed its fourth year, has established itself as a practical working organization, and is perhaps the greatest contribution that has been made toward the protection of the teacher upon conditions that secure life, safety, and independence. In the Teachers Insurance and Annuity Association, the Foundation has presented a scientific and successful solution of the problem which the founder set before the trustees.

Along with the development of this new agency, the trustees have likewise continued the payments of pensions to those who had expectations under the old system of retiring allowances. For this purpose the trustees will expend, during the next generation, many millions of dollars whose total will furnish a generous pension to all such teachers who have expectations. In order that this stream shall not be exhausted by unexpected drains, it is necessary that the trustees examine the actual possibilities of the fund from year to year and make such modifications as experience may show to be necessary in the distribution of their reserves in the interest of the whole body of teachers. The trustees will find in the report of the auditor a very satisfactory statement touching the handling of the securities in Reserve Fund Number One by the finance committee. This reserve is made up mainly of securities that mature within the next twenty-five years, since the reserve is to be expended, principal and interest, in the payment of pensions. The reserve was increased during the year by approximately $800,000, of which $60,000 arose out of profits in the sale of securities.

Another contribution which the Foundation has made to the whole problem of

pensions has been the description year by year in its reports of all pension systems in all parts of the world having any relation to the question of teachers pensions. These have included in many cases the pensions of industrial groups. The reports of the Foundation during these eighteen years contain the most complete literature touching pensions and pension systems to be found in any publications in the world.

The relation of the Foundation to educational development and the studies which it has carried on with respect to various current problems in education have occupied a large part of the activities of the officers and of the staff of the Foundation. These studies, which have been published in sixteen bulletins, have concerned themselves not only with special problems such as those of medical education, of legal education, and of engineering education, but also with the underlying fundamental questions of education which relate to good teaching, to the content of the curriculum, and to the cost of public education. The establishment of the American Law Institute during the present year, by one of the most distinguished groups of judges, lawyers, and law teachers ever brought together, is directly related to the studies on legal education which the Foundation has carried out through its Division of Educational Enquiry. Experience seems to indicate that an agency such as the Foundation, standing apart from the immediate institutional life and having no constituency of its own, can do its greatest service by enlisting in such studies the most able students in different institutions, and that out of the contact brought about in such groups between teachers, administrators of school systems, members of the staff of the Foundation, and others there is reached a degree of knowledge and of judgment with regard to these problems which commands a larger respect and attention than can be had from the isolated statement of any one individual.

Outside of the direct activities involved in the study and establishment of pension systems and in the educational enquiries and reports that have been made, the officers of the Foundation have necessarily been involved in a number of educational relations of a temporary character having to do with the inauguration and operation of the educational organizations of the country, such as the College Entrance Examination Board, the Association of American Colleges, the Association of American Universities, the American Council on Education, the American Association of University Professors, and the various other organizations of those involved in the work of teaching or organization of education.

It has thus come about that, during the eighteen years of its history, the Foundation, while pursuing in the main two specific lines of activity — the one having to do with pensions and pension systems, the other having to do with educational studies — has nevertheless, by the very fact of these activities, been involved in greater or less degree with all those complex relations in education which arise by reason of the relationships between the schools of a nation and the various bodies that have to do with education. The Foundation has sought, during these years, to be hospitably minded toward any agency in education that cared for its coöperation.

PROGRESS OF THE TEACHERS INSURANCE AND ANNUITY ASSOCIATION

When the plan of the Teachers Insurance and Annuity Association, operating directly with teachers, was first broached, doubt was expressed as to the success of the project if no agents were to be employed. How little this doubt was justified is indicated by the fact that the Teachers Insurance and Annuity Association enjoyed during its fourth year a continuing and increasing confidence on the part of the university and college teachers in the United States and Canada. The comparative table below shows a sustained development that is in every way gratifying.

The Fourth Annual Report of the Board of Trustees for the year 1922 indicated a growth unusual among life insurance companies. The assets of the Association increased during the year by forty per cent, its contracts in force by fifty-two per cent, and its premium income by eighty per cent. The Association is rapidly becoming one of the largest companies in the country with respect to annuities. As this report goes to press, October 1, 1923, the Association has a total of 2901 different policy-holders, 1750 holding annuity contracts, 1450 holding life insurance policies, and 299 holding a combination of the two.

The number of insurance and annuity contracts in force as of October 1, 1919, 1920, 1921, 1922, and 1923, is shown in the following table:

Date	*No. Ins. Policies*	*Total Ins.*	*No. Annuity Contracts*	*Total Annual Annuity*
October 1, 1919	174	$784,336	113	$109,438
October 1, 1920	553	2,795,298	450	494,915
October 1, 1921	982	4,973,175	776	917,064
October 1, 1922	1,519	7,928,416	1,175	1,496,174
October 1, 1923	2,057	10,889,795	1,755	2,267,280

This record shows that members of the teaching profession are fully capable of arranging for their life insurance and old age protection without the medium of the agent, when the facts are put before them by means of printed matter and by correspondence with competent and financially disinterested advisers. While agents may be necessary in the commercial life insurance world, they are not needed when dealing with a highly intelligent and discriminating body such as the faculties of our institutions of higher learning.

The large number of institutions represented by the policy-holders has been a cause of especial satisfaction throughout the history of the Association. The increase in this number to 413 on October 1, 1923, implies a continued extension.

The number of universities and colleges that share in the provision of retiring allowances for their officers and teachers increased during the year (ending June 30, 1923) to 84. The participation of 21 other institutions of education and research makes the total number of contributing institutions 105.

The additions during the year represent all parts of the country, from Birming-

ham-Southern College and the College of Charleston, to Oberlin College, Brigham Young University, and the University of Denver. The University of Arkansas, the University of Utah, and The Citadel, the Military College of South Carolina, enlarged the number of state-supported institutions that have adopted the contracts of the Association. With the addition to the list of the Carnegie Institute of Technology, all of Mr. Carnegie's large endowments, six in number, have adopted the contracts of the Association. Four of Mr. Rockefeller's largest endowments have announced their intention of adopting these contracts, beginning with January 1, 1924. The complete list of participating universities and colleges given on page 26 now includes most of the representative institutions of the United States and Canada.

Policy-holders are free from all costs of management. In addition the trustees have, as in each year heretofore, been able to set aside for all annuity contracts interest at the rate of $\frac{1}{2}$ of one per cent in addition to the contractual rate of 4 per cent, the highest allowed by law, and also to pay on all insurance policies dividends of 1 per cent on the reserve, over the contractual rate of $3\frac{1}{2}$ per cent, the highest allowed by law, together with a conservative part of the saving from favorable mortality. Pages 24 to 26 show how far this reduces the cost of insurance provided by the Association below that of other legal reserve companies.

During the year ending June 30, 1923, one insurance contract was terminated by death, that of Henry William Brown, professor of English at Colby College. Four annuity contracts were so terminated. The proportion of contracts with the Association that are allowed to lapse is negligible when compared with this proportion in commercial companies.

In accordance with the plan of having one-fourth of the trustees of the Association elected upon direct nomination by the policy-holders, Thomas Sewall Adams, professor of political economy at Yale University, was elected at the fifth annual meeting of the stockholders, on November 14, 1922, a trustee for the term of 1922–26. Professor Adams received 504 of the 608 votes sent to the policy-holders' committee. His familiarity with middle western as well as eastern universities, through his professorships at the University of Wisconsin and Washington University, as well as at Cornell and Yale, and with state and federal financial administration as assistant to the treasurer of Porto Rico, and expert for the Wisconsin Tax Commission, the Department of Commerce and Labor, and the Treasury, will be of particular value to the Association.

It will be recalled that at the inauguration of the plan in 1921, Samuel McCune Lindsay, professor of social legislation, Columbia University, was elected a trustee for the term 1921–25. The policy-holders' committee will meet on October 6, 1923, for the nomination of a third trustee, for the term 1923–27.

The number and distribution of the contracts in force made it possible for the trustees at their annual meeting, on November 14, 1922, to increase, beginning with January, 1923, the maximum amount of insurance that will be written upon the life

of one person to $25,000, provided that not more than $10,000 of this amount be on a plan involving term insurance. In this matter the trustees have practised a sound conservatism. The original maximum of $5000, adopted in 1918, was increased to $10,000 in 1919, to $15,000 in 1920, to $20,000 in 1921, and beginning with 1923, to $25,000.

In 1921 the officers of the Association asked the opinion of policy-holders concerning the desirability of attaching to the life insurance policies of the Association, not to the annuity contracts, a provision, like that offered by nearly all commercial companies, calling for the payment of a certain income in the event of total permanent disability occurring before the age of sixty. Only fifteen per cent of the policy-holders expressed an interest in such a contract.

Since that time the officers have made extensive enquiry as to the possibility of contracts providing an income in case of disability unfitting the holder for the work of a teacher. Studies are being made of the incidence among teachers of disability such as would incapacitate them for further teaching and would unfit them for engaging in any work offering a substantial financial return. Meanwhile, the life insurance contracts of the Association provide for their continuance in full force without further payment of premiums in case the insured becomes totally and permanently disabled before reaching the age of sixty-five, and teachers who care to do so may procure disability income protection in separate contracts from various commercial companies.

One of the growing services of the Association is the provision of full and disinterested information concerning annuity and insurance protection for university and college teachers. It is gratifying to note that an increasing number of agents, realizing that their companies cannot hope to compete with the very low net cost of the Association, are advising teachers to insure for the maximum amount in the Association.

The *Life Insurance Courant*, one of the leading periodicals in the field of insurance, printed the following appreciation of the work of the Association in its issue for July, 1923:

> "The Teachers Insurance and Annuity Association of America is a regularly incorporated life insurance company of New York, and is subject to the supervision of the State Superintendent of Insurance.
>
> "This Association was organized in 1916 at the instance of the Carnegie Foundation for the Advancement of Teaching. Its paid-in capital of $500,000 and surplus of an equal amount were contributed by the Carnegie Corporation of New York, and they are, respectively, five and ten times the legal requirement. Besides giving security additional to that furnished by the full legal policy reserves, the paid-in capital and surplus furnish an income for the expenses of management, resulting in substantial annual savings to the policy-holders. The Association is governed by a board of sixteen trustees, four of whom are chosen by the policy-holders.
>
> "Its charter specifically stipulates that the business of the Association is to be conducted without profit to the Corporation or to its stockholders, and this enables the Association to offer insurance and annuities to college teachers at cost,

without the customary loading for expenses. There are no overhead charges which in the ordinary company absorb a considerable proportion of the premium paid by the policy-holders, and this results in a considerable saving to the policy-holders, ranging anywhere from about 15 to 45 per cent depending upon the plan and age at issue.

"Not only are the policy-holders relieved of all costs of management but in addition the trustees have been able to set aside for all annuity contracts interest at the rate of one-half of one per cent in addition to the contractual rate of 4 per cent, the highest allowed by law, and also to pay on all insurance policies dividends of one per cent on the reserve, over the contractual rate of $3\frac{1}{2}$ per cent, together with a conservative part of the saving from favorable mortality. While the policies are written as non-participating contracts they are thus in effect participating annual dividend policies.

"The Association has great financial backing and its strength and security are unquestionable. At the end of 1922 it had surplus of $645,376 in addition to its capital of $500,000, and its total assets were then $2,220,294.

"The Association has a splendid life insurance proposition for college professors and teachers, and we believe that the life insurance men of the country generally might well serve the interests of such men and women by recommending the Association to them."

The following tables present most emphatically the large savings made by policy-holders in the Association. Many making comparisons have failed to realize that these continue year after year.

The net costs given for the first year are the premiums which appear in the policies. Those for subsequent years are after allowance for dividends actually paid. The dividends at the end of the first policy year can be obtained by subtracting net costs given for the second year from the initial costs. Similarly, second year dividends are the difference between the initial and net costs shown for the third year.

All policies of the Association are on standard forms, and comparisons are here made with similar policies. The premiums of the Association include the Disability Waiver of Premium charge.

Comparison of Net Costs under Policies issued in 1919

Twenty-Year Endowment — $10,000

Beginning of Policy Year	*Net Cost Average of Ten Low Cost Companies*	*Net Cost Teachers Insurance and Annuity Association*	*Annual Saving in Net Cost to Teachers*	*Saving Expressed as a Percentage*	*Accumulated Saving at 5% Interest*
		AGE AT ISSUE 30			
1	$485.20	$396.90	$88.30	22%	$88.30
2	439.40	380.70	58.70	15%	151.42
3	435.10	377.00	58.10	15%	217.09
4	429.10	373.20	55.90	15%	283.84
5	423.90	369.20	54.50	15%	352.53

Beginning of Policy Year	*Average of Ten Low Cost Companies*	*Net Cost Teachers Insurance and Annuity Association*	*Annual Saving in Net Cost to Teachers*	*Saving Expressed as a Percentage*	*Accumulated Saving at 5% Interest*
		AGE AT ISSUE 45			
1	$541.40	$436.60	$104.80	24%	$104.80
2	482.00	416.10	65.90	16%	175.94
3	477.30	411.70	65.60	16%	250.34
4	471.90	407.10	64.80	16%	327.66
5	465.70	402.50	62.60	16%	406.64
		Twenty-Payment Life — $10,000			
		AGE AT ISSUE 30			
1	$324.00	$248.20	$75.80	31%	$75.80
2	283.30	233.30	50.00	21%	129.59
3	280.90	230.90	50.00	22%	186.07
4	276.90	228.40	48.50	21%	243.87
5	272.30	225.80	46.50	21%	302.56
		AGE AT ISSUE 45			
1	$455.30	$355.40	$99.90	28%	$99.90
2	399.00	335.60	63.40	19%	168.30
3	395.20	331.80	63.40	19%	240.12
4	390.40	327.90	62.50	19%	314.63
5	383.80	323.90	59.90	19%	390.26
		Whole Life — $10,000			
		AGE AT ISSUE 30			
1	$229.40	$174.00	$55.40	32%	$55.40
2	191.00	159.80	31.20	20%	89.37
3	189.60	157.90	31.70	20%	125.54
4	187.30	156.20	31.10	20%	162.92
5	185.20	154.20	31.00	20%	202.07
		AGE AT ISSUE 45			
1	$372.60	$288.80	$83.80	29%	$83.80
2	318.40	269.60	48.80	18%	136.79
3	315.60	266.30	49.30	18%	192.93
4	312.00	263.00	49.00	19%	251.58
5	307.20	259.50	47.70	18%	311.86
		Ten-Year Term (Convertible) — $10,000			
		AGE AT ISSUE 30			
1	$124.80	$86.90	$37.90	44%	$37.90
2	101.50	77.60	23.90	31%	63.70
3	103.80	76.60	27.20	36%	94.09
4	102.00	75.70	26.30	35%	125.09
5	102.00	74.60	27.40	37%	158.74

Ten-Year Term (Convertible)—$10,000 (*Continued*)

Beginning of Policy Year	*Net Cost Average of Ten Low Cost Companies*	*Net Cost Teachers Insurance and Annuity Association*	*Annual Saving in Net Cost to Teachers*	*Saving Expressed as a Percentage*	*Accumulated Saving at 5% Interest*
		AGE AT ISSUE 45			
1	$190.60	$131.60	$59.00	45%	$59.00
2	158.30	119.20	39.10	33%	101.05
3	161.20	117.40	43.80	37%	149.90
4	156.20	115.50	40.70	35%	198.10
5	155.30	113.60	41.70	37%	249.71

FORMAL ACTION OF COLLEGES AND UNIVERSITIES IN THE ESTABLISHMENT OF OLD AGE ANNUITIES

THE last four reports of the president of the Foundation included various resolutions used in adopting the contributory system of annuities by universities and colleges. The total number of such institutions increased to eighty-four through the adoption of the plan, during the year July 1, 1922, to June 30, 1923, by the University of Arkansas, Birmingham-Southern College, Brigham Young University, Carnegie Institute of Technology, the College of Charleston, The Citadel, the University of Denver, Oberlin College, Peking Union Medical College, and the University of Utah (10). The more suggestive of the resolutions used by them are printed below, together with a new set of resolutions adopted by Princeton University, removing certain limitations in earlier regulations that were pointed out in the Seventeenth Annual Report of the Foundation.

The complete list of universities and colleges that have adopted the contracts of the Teachers Insurance and Annuity Association is as follows:

Acadia University
Adelphi College
University of Alabama
Alfred University
Allegheny College
Alma College
American School of Classical Studies at Athens
American School of Oriental Research
Antioch College
University of Arkansas
Bates College
Berea College
Birmingham-Southern College
Boston University
Bowdoin College
Brigham Young University
Brown University
Bryn Mawr College
California Institute of Technology
Carleton College
Carnegie Institute of Technology
Case School of Applied Science
Centre College
College of Charleston
University of Chicago
University of Cincinnati
The Citadel
Clark University
Coe College
Colorado College
Columbia University
including Teachers College
and the College of Pharmacy
Converse College
Cornell College
University of Denver
Dickinson College
University of Dubuque
Elmira College
Fisk University
Fukien Christian University
George Peabody College
Goucher College
Grinnell College
Hamilton College
Knox College
Lawrence College
Lehigh University
McGill University
Marietta College
Meadville Theological College
University of Michigan

Mount Holyoke College
New York University
Oberlin College
Occidental College
Ohio Wesleyan University
Packer Collegiate Institute
Peking Union Medical College
University of Pennsylvania
University of Pittsburgh
Polytechnic Institute of Brooklyn
Princeton University
Queen's University
Ripon College
University of Rochester
Rollins College
Rose Polytechnic Institute
Smith College
University of South Carolina
Stanford University
Stevens Institute of Technology
Swarthmore College
University of Toronto
Tulane University
Union College
University of Utah
Vanderbilt University
Washington and Lee University
Wells College
Wesleyan University
Whitman College
Williams College
Winthrop College
Worcester Polytechnic Institute
Yale University

THE UNIVERSITY OF ARKANSAS

Action of the Board of Trustees April 23, 1923.

The Board of Trustees of the University of Arkansas adopts, for the retirement of its administrative officers and teachers, the contributory plan of the Teachers Insurance and Annuity Association of America.

1. For each full-time teacher or research worker resident at Fayetteville, above the grade of instructor, and for each of the following full-time administrative officers, namely, the President of the University, the Deans of the Colleges, the Dean of Women, the Director of University Extension, the Registrar, the Chief Financial Officer, the Executive Secretary to the President, and the Librarian, who elects to enter the contributory plan, and who continues to contribute a percentage of his annual salary, the Board of Trustees will pay annually, in monthly installments throughout the period during which it employs him, and during which he so contributes, a like sum not exceeding five per cent. of his annual salary; provided that no teacher or officer shall be eligible to this privilege until he has had two years of service in the university.

2. Each participating administrative officer or teacher holds a separate personal contract with the Teachers Insurance and Annuity Association. This contract is the property of the individual teacher or officer, and all payments on the contract, whether made by himself or by the University, accumulate for his benefit. Since the University is a co-contributor for a definite end, namely, support for the participant's old age, it is understood that in all cases the annuity policy or policies shall be deposited with the President of the University under the agreement that they shall not be assigned, pledged or surrendered without consent of the President, so long as the University continues its contribution.

3. The obligation of the University to pay these annual amounts towards the accumulation of an annuity for the participant is of the same nature and extent as its obligation to pay the participant's salary, and will cease when the participant becomes sixty-five years of age. The amount of such contribution, as of the salary, may be hereafter increased, decreased, or withdrawn, should circumstances make such change advisable.

4. Retirement shall be optional at the age of sixty-five, to be put into effect at the choice of the Board of Trustees or of the one who is to be retired; but after the age of seventy the retirement shall be compulsory, unless the Board annually re-elects.

5. In view of its payments the governing body of the University desires to make clear that all teachers, officers, or permanent employees, eligible to this plan, who do not elect to participate in it, will have no basis of claim upon the University for retiring allowances in old age.

OBERLIN COLLEGE

Action of the Trustees, January 18, 1923.

RESOLUTIONS

CONCERNING THE GRANTING OF CONTRIBUTORY PENSIONS

1. That the practice of granting non-contributory pensions to teachers and administrative officers of the College be discontinued as to those who retire after August 31, 1924, except as hereinafter provided.

2. That the College adopt for the retirement of all teachers and administrative officers of the grade of instructor and above, who are not eligible for the non-contributory pensions of the Carnegie Foundation, and who retire after August 31, 1924, the contributory pension plan, as now established by the Carnegie Foundation and operated through the Teachers Insurance and Annuity Association of America.

3. That participation in the new plan be optional in the case of teachers and officers entering the service of the College prior to September 1, 1923, but obligatory upon all teachers and officers entering after that date; that eligibility for participation begin upon the attainment of permanent appointment, or, in the absence of such appointment, at the end of three years of service.

4. That the College contribute to the Teachers Insurance and Annuity Association, from September 1, 1922, a sum equal to five percent of the annual salary of teachers and officers eligible under the terms of Paragraph 3 and who accept participation in the new plan, provided an equal payment be made by the teachers and officers themselves; that the payments of the College begin upon receipt of the written request of the teacher or officer that the College retain five percent of his monthly salary and make the entire payment to the Association; that in case of the withdrawal of the teacher, voluntarily, or involuntarily, from the service of the College, all obligation of the College to contribute cease.

5. That the amount upon which the College pays its five percent be the regular salary of the teacher or officer concerned, up to a maximum annual salary of $4,500, but not including any additional sum paid for special services.

6. That when the joint contributions of the College and the teacher or officer, each at the rate of five percent, reach a sum sufficient, under the terms of the policy of the Teachers Insurance and Annuity Association, to produce a retiring allowance

of $1,800 annually for the teacher or officer himself at the age of 68 plus $900 for his wife as provided in Option III of Section XIII of the Non-Participating Deferred Annuity Policy, the obligation of the College to contribute shall cease.

7. That if a teacher or officer elects, in order to increase the amount of his retiring allowance, to make his contributions at a higher rate or upon a larger amount than the College does, the College be not relieved thereby in any degree from its obligation to continue its payments until they alone reach a sum sufficient, under the terms of the policy of the Teachers Insurance and Annuity Association, to produce half of a retiring allowance of $1,800 annually for the teacher or officer himself at the age of 68, plus $900 for his wife, as provided in Option III of Section XIII of the Non-Participating Deferred Annuity Policy, unless the teacher or officer reaches the age of retirement before such a sum is reached.

8. That when the joint contributions of the College and a teacher or officer who entered the service of the College before November 20, 1918, but is eligible for a non-contributory pension from the Carnegie Foundation, are insufficient, under the terms of the policy of the Teachers Insurance and Annuity Association, to produce a retiring allowance of $1,800 annually for the teacher or officer himself at the age of 68 plus $900 for his wife, as provided in Option III of Section XIII of the Non-Participating Deferred Annuity Policy, the College supplement these allowances with amounts sufficient to bring the whole annuity up to $1,800 for the teacher or officer himself at the age of 68 plus $900 for his wife, as provided in Option III of Section XIII of the Non-Participating Deferred Annuity Policy; Provided, however, that an unmarried teacher shall not be eligible for more than the allowance of $1,800 for himself or herself, that a widow who has not been the wife of a teacher for ten years before his retirement shall not be eligible for any supplementary allowance, and that the supplementary allowance to a widow shall cease in the event of her remarriage.

9. That when a husband and wife are both teachers or officers in the institution, the College do not make contributions toward annuities for both, nor toward an annuity for the wife whose husband is eligible for a non-contributory pension from the Carnegie Foundation; but in either case, in the event of the death of the husband before retirement, the widow immediately becomes eligible to participate in the contributory pension plan, and, if the joint contributions of the College and herself prove insufficient to produce an annuity of $1,800 at her retirement, to receive a supplementary allowance from the College sufficient to make, in the judgment of the Board of Trustees, her entire allowance from return of premiums in event of husband's death plus her own annuity from the Teachers Insurance and Annuity Association and the College equivalent to an annuity of $1,800.

10. That if a teacher eligible to retire under these rules with an annuity from the Teachers Insurance and Annuity Association and a supplementary allowance from the College desires to retire before reaching the age of 68, he be allowed to do so at the end of any year after reaching his sixty-fifth birthday, with the benefits of

his annuity contract, in which case however any supplementary allowance from the College would be for such amount as would reduce the maximum (total) retiring allowance by one-fifteenth for each year by which his age is less than sixty-eight.

11. That the teacher's policy be deposited with the Treasurer of the College, with an agreement that it shall not be surrendered or pledged for loans without the consent of the Board of Trustees.

12. All the provisions of the foregoing are based on the policy of the Teachers Insurance and Annuity Association as now written and are to be construed in accordance therewith.

13. That the College reserve the right to make exceptions to these rules in special cases, and to revise this plan in such ways as experience may prove to the Board of Trustees to be necessary or desirable; but such changes shall not affect teachers and officers who have entered into the plan prior to the adoption of the changes, except by mutual agreement.

PRINCETON UNIVERSITY

Action of the Board of Trustees, April 12, 1923.

Rule for Retirement

Any member of the University teaching staff may retire at age sixty-five, and every member must retire at age sixty-eight; provided, however, that in special cases, by a vote of the Board of Trustees of the University, an individual may be continued in active service beyond the retiring age for periods not exceeding three years from the time of any special vote taken. If the retiring age occurs during an academic year, retirement shall become effective and date from the end of the current academic year.

University Plan for Retiring Allowances and Insurance

1. Every member so retiring shall be entitled to receive during the remainder of his life an annual retiring allowance equal to one-half of his annual salary as teacher at retirement; provided that the obligation of the University shall be reduced by the amount of any Carnegie or similar allowance to which any such member may be entitled. Any member so retiring, not immediately entitled to a Carnegie allowance, shall receive from the University his half salary as above defined (with such additions thereto as may be necessary to qualify him for the maximum Carnegie allowance) until he is entitled to maximum allowance under the Carnegie rules. Any member of the teaching staff who is entitled to a Carnegie retiring allowance and who forfeits such retiring allowance because of any voluntary act by which the same is forfeited under the Carnegie rules, may be deprived of his retiring allowance from the University. The annual retiring allowance above provided shall in no case exceed the sum of $3,250.

2. The foregoing plan will be subject to modification or the adoption of any other plan equally advantageous to retiring Faculty members.

3. The University will issue to each professor, associate professor and assistant professor a death benefit certificate assuring him that in case of his death before retirement and while he continues an active member of the teaching staff of the University, it will pay the sum of $5,000 to his wife, if he leave one, otherwise to his children, or, if he leave none, then to such person or persons as he may, with the approval of the President, designate.

4. The trustees will give special consideration to the circumstances of each of the following cases as they arise:

(*a*) A member of the teaching staff suffering temporary disability;

(*b*) The widow of a retired member of the teaching staff;

(*c*) A member of the teaching staff retired before the age of sixty-eight for incapacity, inefficiency or other good cause, under the procedure adopted by the Board on June 15, 1918.

Alternative Plan

If any member of the teaching staff of the University holds or obtains a deferred annuity policy providing for the payment to him of an annuity after retirement at the age of sixty-five or over, issued by the Teachers' Insurance and Annuity Association of America, or by such other company as is approved by the Finance Committee of the University, the University will, on his request and the relinquishment by him of all benefits under the University Plan for Retiring Allowances and Insurance above defined, and on being satisfied that his plan of insurance meets the purposes thereof, contribute each year toward the payment of his premiums on such annuity policy an amount equal to the sum contributed by such member, not, however, exceeding five per cent. of his salary for said year, nor a maximum of $300 per year; provided that

(*a*) No contribution shall be made for an instructor until he has completed two years of service in Princeton University;

(*b*) No contribution shall be made after the end of the academic year during which the member attains the age of sixty-five, nor after such member leaves the employment of the University.

(*c*) The teacher's policy shall be deposited with the Treasurer of the University, with an agreement that it shall not be surrendered or pledged for loans without the consent of the Trustees.

(*d*) No contribution shall be made by the University for a teacher entitled to a Carnegie Foundation annuity;

(*e*) When as the result of the contributions already made by the University and the annuitant, the annuity pledge to the member at the age of sixty-five years shall reach $3,000 annually, all further obligation on the part of the University shall cease;

(*f*) The University reserves the right from time to time to modify, amend or abrogate this alternative plan.

THE LIFE EXPECTATION OF COLLEGE TEACHERS

THE nature of the risk which the Teachers Insurance and Annuity Association assumes in writing insurance policies and annuity contracts for college teachers is of course dependent on the expectation of life of teachers. In a similar way the load ultimately to fall upon the resources of the Carnegie Foundation depends upon the nature of this expectation.

Hitherto there have been no exact data concerning the nature of this expectation. It has been assumed that the college teacher was a good risk, and as a basis of computing the cost of the risk, both the actuaries of the Insurance and Annuity Association and of the Foundation have assumed the risk derived from McClintock's Male Annuitants' Tables, the standard tables upon which insurance companies base their annuity rates, and which are prescribed by the New York State Insurance Department for the valuation of annuity contracts.

The actuary of the Teachers Insurance and Annuity Association has kept track constantly of the experience of the Foundation, in order to derive from that experience whatever information might throw light upon the life expectation of the teachers who have expectations from the Foundation or who hold insurance or annuity contracts from the Teachers Insurance and Annuity Association.

During the past year, a study has been made of the experience of the Carnegie Foundation with respect to the expectation of life of those receiving retiring allowances during the past eighteen years. The number of lives involved was six hundred and sixty-six. The total number of deaths expected from the tables during this period was three hundred and sixty. The actual number of deaths was three hundred and twenty, or eighty-nine per cent of the deaths expected. Eliminating cases of disability, the actual deaths were but eighty-three per cent of those expected from the tables.

It may well be that the number of lives involved is too small and the period covered too short to warrant any trustworthy conclusions. However, a comparison with the mortality expected in accordance with a new table—that of the American Annuitants—gives results so close to these that it seems reasonable to conclude that the mortality will follow closely the experience indicated during these eighteen years. The American Annuitants Table reflects the experience of twenty American companies, issuing fully ninety-five per cent of the immediate annuities on single lives granted in the United States up to 1918.

The significance of the result just referred to, should the experience of the future correspond with that of the past eighteen years, is evident. The deferred annuity contracts of the Teachers Insurance and Annuity Association are based on the McClintock Tables and four per cent compound interest. If the mortality among those receiving contractual annuities should conform with that of the men pensioners of the Foundation during the past eighteen years, the interest earnings on the invested premiums in excess of those allowed on the contracts must be large enough to offset the

larger amounts to be paid out in consequence of the increased longevity over that contemplated under the McClintock Tables. Excess interest earnings of approximately one-half of one per cent would be sufficient to overcome such an increased longevity, should it take place. The Teachers Insurance and Annuity Association has earned a margin greater than this from the beginning, and is now putting into a special reserve fund excess interest earnings equal to one-half of one per cent to supplement the regular legal reserve on the McClintock four per cent basis.

The mortality among disability pensioners of the Foundation was also examined. While the number of cases was small—being only forty-seven in all—it is interesting to note that the rate of mortality among the disabled lives was twenty per cent higher than that expected by Hunter's Disability Tables. This indicates that teachers have applied for disability allowances only in cases of severe need, and that the Foundation has granted such disability allowances only in such cases.

The fact that the mortality among the entire body of men pensioners of the Foundation is but eighty per cent of that expected under the American Experience Table, which is the standard life insurance table, leads to the conclusion that the Association may safely issue life insurance policies at the higher ages so long as the applicant passes a satisfactory medical examination.

THE ABUSE OF INTERCOLLEGIATE ATHLETICS

THE Carnegie Foundation, through its Division of Educational Enquiry, has conducted, year after year, a series of studies the results of which are published in the form of bulletins. There have each year been laid before the executive committee applications for many such enquiries on the part of the Foundation which it was unable to undertake. It has been the policy of the trustees, in carrying out these studies, to seek in each case to do a serious and thorough piece of work. In making the studies the Foundation has relied, not wholly on the members of its own staff, but in all cases has called together representatives of those directly in touch with the particular problem which it was seeking to study.

Experience has likewise indicated that the Division of Educational Enquiry could do its largest service, not only by making a thorough study of a question at a given epoch, but by following up through a series of years the development in that field in which the study lay. For example, thirteen years ago the Foundation published the admirable study of Medical Education by Mr. Abraham Flexner. It has continued, up to the present time, to follow up that study by constant reviews of the situation with respect to medical education. It is believed that such a procedure has a cumulative result.

Among the subjects of study to which the attention of the trustees has been most frequently called is that of the state of intercollegiate athletics. There have been constant complaints that the intercollegiate contests were leading both institutions and

students into expenditures out of proportion to any reasonable standard, and that the sharpness of the rivalry had injured, in many instances, the standards under which students were admitted. It was also claimed that there were other coincident sources of demoralization, such as the interference with work, the large amount of betting incident to the sharp rivalry, and other objectionable features.

Hitherto the Foundation has not found itself able to undertake a study of the question of intercollegiate athletics. It had on hand other studies which, for the moment, could not be laid aside, and the trustees have not felt convinced that this field was one in which the Foundation was called upon, in the past, to enter.

The request was again brought to the attention of the trustees during the past year. Almost coincident with the presentation of the matter to the Foundation the Association of Colleges and Secondary Schools of the Southern States had appointed a committee of five to enquire into the condition and administration of athletics in the colleges that are members of that association, with full authority and instructions to investigate entrance credits of athletes, their records in college, past academic record, absences from college, the salaries of coaches and by whom paid, and such other matters as pertain to the wholesomeness of intercollegiate athletic games. This committee was without funds for the prosecution of its enquiry. Inasmuch, however, as its members served without pay and only a modest sum was required for the expenses of the committee, the trustees of the Foundation decided to allocate to the committee a sum not exceeding $1000, in order to enable them to make an enquiry into the situation of intercollegiate athletics in the colleges composing their own association. The report of that committee has recently been completed and brings to light certain suggestive and interesting facts touching the conduct of competitive athletics in these colleges and universities. The enquiry of the committee was carried on, in large measure, through a questionnaire sent out to forty-three institutions, members of the association, and to twenty-seven not members of the association. Replies were received from twenty-seven of the associated institutions and from six of the non-associated institutions. This method of investigation was probably the only one that the committee could undertake, but it is clear that the method is open to certain objections by reason of the fact that the institutions in which abuses are greatest are those least likely to furnish the information desired. Of the institutions from which replies were received, six were in Virginia, five in Kentucky, four in Texas, three each in North Carolina and Tennessee, two each in Alabama, Georgia, and West Virginia, and one each in the District of Columbia, Florida, Louisiana, Maryland, Mississippi, and South Carolina.

The committee arranged the replies to its questionnaire in a tabular form, separating the replies from members of the association from the replies of colleges not members of the association. It is the judgment of the committee, as based upon a study of these records, that there is a healthier condition in athletics in these southern states than would be indicated by the general comment and rumor heard on all sides.

It is, of course, a question how far these reports reflect the situation in institutions which preferred to make no report.

The committee's statistics give definite and interesting information concerning a number of matters.

The report shows that faculty control is practically universal in matters of eligibility of players, entrance requirements, and scholastic standing, but that in many cases this control does not extend to the finances, to the selection of coaches, or to the arrangement of schedules, in which alumni have a voice out of proportion to that of the faculty. The committee believes that good may be accomplished by the establishment, on the part of institutions, of regular departments of physical education with a man of professorial rank at the head.

The committee found that the maximum annual expenditure (season of 1921) in any one college for athletics was $109,797.41. The second largest annual expenditure was $57,000. The minimum was $1320.27. The average expenditure for the twenty-six associated colleges that made returns was $24,334.09. Nine exceeded this average and seventeen fell below it. The committee expresses the belief that the great and constantly growing cost of intercollegiate athletics constitutes one of the gravest abuses. The harm lies, in their judgment, not only in the extravagance engendered in undergraduates, but in the over-exaggeration in the mind of the student of the relative importance of athletics in the general scheme of college work. The committee finds that, in order to meet this constantly growing burden, admission to games is put as high as the traffic will bear, and that some institutions make substantial profits out of the operations of the football season. The committee recommends, as worthy of consideration, the elimination of gate receipts and the making admission to games strictly a matter of invitation.

The committee finds that, among the colleges whose replies were received, the salaries of the head coaches in football range from $400 a year to $7000, the average being a little over $3000. The man receiving the salary of $7000 was employed for part-time only and did not rank as a member of the faculty. The salary of the head coach in many institutions exceeded that of the representative professor.

The committee draws the conclusion that the athletic coach, and in particular the football coach, sets the standard of the whole system of intercollegiate sports and is responsible for many of its most demoralizing features. It recommends that the coach should be a member of the faculty employed for the full session and elected by the faculty or other college authorities, that his salary should be paid by the institution, and not by alumni or other organizations, and should in nowise be contingent on the winning of certain critical games. The committee urges that a coach of high character and with a right sense of the relation of his work to that of other departments of the institution has an opportunity to exert an influence for good greater than that of almost any other man associated with the college.

The committee went with care into the record of the entrance credits of the men

admitted to various college teams. They report that in some cases students with very low standards were admitted to these teams, and such students were in most cases "special" students. Some of the subjects which were credited for admission to college were of an extraordinary kind. For example, one 'Varsity player was credited with preparation in eight courses — two in English, one in mathematics, one in science, and four in "others." The committee was not able to determine what was covered by the specification — "others." In order to admit certain promising athletes, fractions of courses were counted — a principle which the committee strongly condemns. The committee also recommends that students admitted on account of having reached an age beyond that of the ordinary undergraduate, and who are unable to satisfy the full entrance requirements, should not be allowed to participate in intercollegiate games. They designate the playing of "special" students as one of the easiest and surest channels for the introduction of "ringers" and other undesirable men into the college contests. Eleven of the institutions examined permit special students without full entrance requirements to play on their 'Varsity teams.

One institution described by the committee reports that it has thirty-one scholarships which are reserved for students of special athletic ability, and that the alumni of the college raise a fund annually to pay board, room rent, and other minor college expenses of its athletes. The same institution states its belief that one of the great evils of intercollegiate athletics lies in the commercializing of the standards of athletic ability. This antinomy would scarcely seem to need comment.

Twenty of the colleges were opposed to the practice of "scouting" for athletic material, six had no definite opinion on the subject, and two were in favor of it. The committee condemns this practice in the strongest way, and states that any head coach who really desires to do so can usually control this situation. The committee suggests that the principals of preparatory schools should take a hand in stopping this practice, and it expresses the opinion that the harm done to the boy in the high school by the present athletic system is greater than that done in the college. The committee believes that the boy coming under such influence at a younger and more impressionable age is more profoundly influenced by its conditions, and it believes also that the newspaper publicity, betting on games, trips away from home, transfer of high school athletes from one school district to another, all tend to make the abuses in the preparatory schools as great, if not greater, than in the colleges.

The reports received by the committee show that the maximum number of days' absence allowed for the purpose of taking part in intercollegiate athletics ranges from zero to twenty days per session, with an average of about fourteen. The committee considers that the playing of intercollegiate games in distant cities, where only a small percentage of the student body of either institution can witness the games, is wholly bad and is a purely commercial enterprise. This practice, in the opinion of the committee, is one of the great contributing causes to the growing spirit of commercialism in intercollegiate athletics. The committee recommends that the playing of games on

neutral territory, under the auspices of commercial organizations, fairs, and other bodies, should be strongly discouraged.

The committee reports that betting is a growing feature of the more important football contests. It finds that many alumni regard a bet on their college team as an expression of loyalty to Alma Mater, and it concludes that students are greatly influenced in this practice by the sight of their elder brothers and their relatives thus supporting the team by risking money upon its success. A greater danger will come, in the opinion of the committee, when the professional gambler, always alert for a place to ply his trade, may decide to turn his attention to intercollegiate football.

The committee, in its summary of the abuses incident to present-day intercollegiate contests, names them as follows:

Commercialism.
Excessive expenditure of money.
Too great an insistence on turning out a winning team.
"Scouting" for athletes in the preparatory schools.
Too great temptation for the smaller institutions to try to rival the larger ones in athletics.
Too great emphasis upon the "training" of athletes.
Tendency toward over-emphasis on the part of the alumni and general public of the relative importance of athletics.
Too much newspaper publicity.
Temptation to administrators and executives to use the athletic reputation of the institution as a means of securing appropriations and endowment.
Gambling.
Intercollegiate sports of benefit to too few students.

As a means of eliminating these abuses, the committee received various suggestions. One institution proposes frankly that intercollegiate athletics be abolished. Others suggest reorganization of athletics for the benefit of the entire student body, another the limitation of athletic budgets, others elimination of the paid coach.

The committee is of the opinion that with control of athletic policies and practices entirely in the hands of the president and the faculty, and with each institution making conscientious efforts to eliminate the abuses within its own walls, many of the evils noted would rapidly disappear. The committee regrets that many colleges and universities are afraid to undertake these problems. They stand in fear of their neighbors, of their alumni, of the general public, of the newspapers, and of the legislatures which deal out appropriations. The committee is of the opinion that a real solution of the problem comes back to common honesty on the part of the college in the regulation of its own affairs, and that any college that so desires and that has the courage of its convictions can have clean athletics.

The question of the honesty and value of intercollegiate athletics comes back, in their judgment, to a question of the honesty, the integrity, and the courage of those who direct the college.

THE INFLUENCE OF ALUMNI UPON THEIR COLLEGES

THE report of this committee with respect to the status of college athletics in the Southern States cannot but raise some apprehension in the minds of reflecting men. The abuses of intercollegiate athletics in southern colleges are certainly no greater than in other parts of the country, but it is quite clear, from this report and from similar enquiries, that the conduct of intercollegiate athletics has brought upon educational institutions in general very definite weaknesses, whatever positive value may have come with them. Apart from the evils of commercialism, extravagance, the temptation to gambling, and other similar by-products, the exploitation of intercollegiate athletics has distorted the perspective of the college life. In the eyes of the student body success in such contests far outweighs that of scholarly work and the old-time academic virtues of simplicity, sincerity, and faithfulness to study. This situation has come about as the result of many contributing factors—the universal tendency of American people to excessive expenditures, the exploitation of athletics by the daily papers, the lack of keen interest in the rewards of scholarship, and the propaganda carried on by the athletic organizations. The most disturbing feature of this whole situation lies in the fact that the college governing boards, and sometimes the faculties, seem to have abandoned, without any sufficient effort, the attempt to keep organized athletics within a field where such contests would be secondary to the intellectual life of the college. For the bad features of the existing situation, those who have to do with the government and conduct of the colleges are primarily responsible. Many college trustees, and a large proportion of college professors, are keenly alive to this responsibility. The unwise competition that has gone on between American colleges has hitherto exercised so powerful an influence in favor of the exploitation of intercollegiate athletics that neither the trustees nor the faculties have had the courage to resist it.

The report of the committee, summarized in the preceding section, draws attention in a specific way to the influence of alumni upon their institutions. For the last two decades a movement has been in progress under which alumni, through their organizations, are furnishing an increasing proportion of college trustees. This movement has had its origin in considerable measure in the desire of trustees to obtain the support and coöperation of alumni in securing funds. This expectation has been measurably successful. Alumni of most colleges and universities, and in particular of our older institutions, have, through their organizations, drawn into the treasuries of their respective institutions large sums of money that otherwise would not have been obtained. Some of these alumni campaigns for money have far exceeded the bounds of good taste in university matters. In this respect the Canadian institutions have set an example to their cousins in the United States which might well be noted. They have conducted their campaigns for funds needed by their institutions within the bounds of academic good taste. Some of our efforts in this direction, even in our oldest institutions, have resembled nothing so much as the Booster Clubs of our Western cities.

The story of the influence of alumni associations in the athletic interests of their colleges raises some question as to how far alumni representation on the boards of trustees has been helpful toward sound educational progress. So far as the evidences go, alumni trustees the country over have thrown the weight of their influence toward a policy of exploitation of athletics rather than toward an increase in the scholarly fruitfulness of their institutions. In any event, it would seem apparent from the history of the last twenty years that those alumni who have gained position and influence with their colleges have been chiefly from the number of those whose interests lay in athletic competition rather than in scholarly development. There are, of course, exceptions to this state of affairs, and notable exceptions in certain institutions. Nevertheless, so far as the general influence of alumni upon their institutions has been made manifest, it may fairly be said that alumni influence has been exerted rather in the exploitation side of their universities than in the development of their steady and serious work.

The question of the selection of a fitting governing body for an educational institution is one of the most important with which an institution can concern itself. There has been a growing tendency in the United States, on the part of alumni associations, to claim an increasing share in the administration of their colleges. Sometimes this claim has been put upon the wrong ground. Some alumni associations have taken the attitude that their institution belonged primarily to them and that in some fashion or other it owed them something. In one sense an institution does belong to its alumni—in the sense of devotion and affection. In another, the alumnus is indebted to his institution, not the institution to him. Even in the universities having the largest income, the expense of the education of the student is in a large measure paid by the public. Every alumnus leaves his college in debt to the institution for part of the cost of his education. In many cases he owes it a still greater debt for the intellectual and cultural inspiration that he has found within its walls. In any case the alumnus is in no position to claim a place on the board of trustees except upon the ground of his fitness to render service to it. That fitness will depend, in large measure, on whether he expects his service to be mainly in the promotion of athletics or in the development of the intellectual and cultural interests of his institution. The tendency to place institutions of learning more and more in the hands of their graduates is one that ought to be examined with great care. It is a distinct obligation upon the graduates themselves to make clear to the public that they hold their trusteeships, not because they are alumni, but because they are preëminently fit to serve on a governing board.

PART III

THE DIVISION OF EDUCATIONAL ENQUIRY

LEGAL EDUCATION

In addition to brief discussions contained in successive Annual Reports, beginning with the Eighth (1913), three special extended bulletins dealing with legal education and cognate matters have been issued:

Number Eight: *The Common Law and the Case Method in American University Law Schools*, 1915.

Number Thirteen: *Justice and the Poor*, 1919.

Number Fifteen: *Training for the Public Profession of the Law*, 1921.

A fourth bulletin, discussing more in detail the present condition of law schools, is now in an advanced stage of preparation. It is hoped that proofs will be ready for distribution among the law schools during the coming academic year.

COMPARATIVE PROFESSIONAL STATISTICS

A previous Annual Report contained a table showing the comparative number of physicians and surgeons, of clergymen, and of lawyers, as computed by the United States Census Bureau between 1880 and 1910.[1] The following table, in the same form, includes the census returns of 1920:

COMPARATIVE FIGURES, 1880–1920, FOR CONTINENTAL UNITED STATES (EXCLUDING ALASKA AND INSULAR POSSESSIONS)

Three Professions

	1880	*1890*	*1900*	*1910*	*1920*
Physicians and Surgeons[2]	85,671	104,805	132,002	157,966	164,781
Clergymen[3]	64,698	88,203	111,638	133,988	168,348
Lawyers[4]	64,137	89,630	114,460	122,149	132,590
Total	214,506	282,638	358,100	414,103	465,719
Total Population	50,155,783	62,947,714	75,994,575	91,972,266	105,710,620

Members of the Profession to each 100,000 Population

Physicians and Surgeons	171	167	173	172	156
Clergymen	129	140	147	145	159
Lawyers	128	142	151	133	125
Total	428	449	471	450	440

Actual Increase during Decade

Physicians and Surgeons	19,134	27,197	25,964	6,815
Clergymen	23,505	23,435	22,350	34,360
Lawyers	25,493	24,830	7,689	10,441
Total	68,132	75,462	56,003	51,616
Population	12,791,931	13,046,861	15,977,691	13,738,354

[1] *Ninth Annual Report*, 1914, p. 17. For corresponding figures as far back as 1850, see *Training for the Public Profession of the Law*, p. 442.

[2] Including "healers," 6834 in 1910, 14,774 in 1920; and "osteopaths," 5030 in 1920.

[3] Including "religious and charity workers," 15,970 in 1910; 41,078 in 1920.

[4] Including "judges, justices, and magistrates," 6816 in 1910; and "abstractors, notaries, and justices of peace," 7445 in 1910; 10,071 in 1920.

Per cent Increase during Decade

	1890	*1900*	*1910*	*1920*
Physicians and Surgeons	22.3%	25.9%	19.6%	4.3%
Clergymen	36.3	26.5	20.0	25.6
Lawyers	39.7	27.7	6.7	8.5
Three Professions together	31.7	26.6	15.6	12.4
Population	24.9	20.7	21.0	14.9

This table shows that the number of physicians and surgeons, and of lawyers, in proportion to the population, reached its peak in 1900. Since then, there has been a progressive decline until now there are relatively fewer members of each of these professions than in 1880. The decline has been most marked in the case of the physicians during the last decade, when this profession increased less than one-third as fast as the population—this in spite of the fact that "healers" and "osteopaths" are included. The decrease in the relative number of lawyers has been greater during the last twenty years, but was more marked between 1900 and 1910 than between 1910 and 1920. During the first of these decades this profession increased less than one-third as fast as the population, and during the second somewhat over one-half as fast. Clergymen, on the other hand, if religious and charity workers are included, have recently shown a substantial increase. Physicians have always outnumbered lawyers in this country. Now, for the first time, "clergymen," as above defined, outnumber even physicians.

Owing to the manner in which the Bureau of the Census collected and tabulated its figures during the earlier years, the above comparison of professional figures is the best that can be made for a period covering more than a single decade. Only for the last decade is it possible to construct a table which on the one hand brings into comparison three broadly distinguished professional groups, concerned respectively with the healing arts, with religion and welfare, and with the law; and on the other hand distinguishes between the subordinate elements of which each of these groups is composed. Only for the last decade also is it possible to add to these three sets of figures a corresponding one for the engineering profession. A table constructed on this basis follows:

COMPARATIVE FIGURES, 1910–1920, FOR CONTINENTAL UNITED STATES
(EXCLUDING ALASKA AND INSULAR POSSESSIONS)

Four Professions

	1910	*1920*	*Actual Increase*	*% Increase*
Physicians and Surgeons[1]	151,132	150,007	*1,125*[2]	*0.7*[2]
Healers	6,834	14,774	7,940	116.2
Dentists	39,997	56,152	16,155	40.4
Trained Nurses	82,327	149,128	66,801	81.1
Total Healing Arts	280,290	370,061	89,771	32.0
Clergymen	118,018	127,270	9,252	7.8
Religious, Charity and Welfare Workers	15,970	41,078	25,108	157.2
Total Religion and Welfare	133,988	168,348	34,360	25.6

[1] Including osteopaths, 5030 in 1920. [2] Decrease.

	1910	*1920*	*Actual Increase*	*% Increase*
Lawyers [1]	114,704	122,519	7,815	6.8
Abstractors, Notaries, Justices of Peace	7,445	10,071	2,626	35.3
Total Law	122,149	132,590	10,441	8.5
Civil Engineers and Surveyors	52,033	64,660	12,627	24.3
Electrical Engineers	15,278	27,077	11,799	77.2
Mechanical Engineers	14,514	37,689	23,175	159.7
Mining Engineers	6,930	6,695	*235* [2]	*3.4* [2]
Total Technical Engineers	88,755	136,121	47,366	53.3
Total Four Professions	625,182	807,120	181,938	29.1
Total Population	91,972,266	105,710,620	13,738,354	14.9

Members of the Profession to each 100,000 Population

	1910		*1920*	
Physicians and Surgeons	164		142	
Healers	7		14	
Dentists	43		53	
Trained Nurses	90		141	
Total Healing Arts		304		350
Clergymen	128		120	
Religious, Charity and Welfare Workers	17		39	
Total Religion and Welfare		145		159
Lawyers	125		116	
Abstractors, Notaries, Justices of Peace	8		9	
Total Law		133		125
Civil Engineers and Surveyors	57		61	
Electrical Engineers	17		26	
Mechanical Engineers	16		36	
Mining Engineers	8		6	
Total Technical Engineers		98		129
Total Four Professions		680		763

It appears from this table that if the four groups be brought into comparison with one another as a whole, the engineers have shown the greatest increase (53.3 per cent), and now outnumber the lawyers, who, as already shown, have increased less rapidly than the population. The groups concerned with religion and welfare and with the healing arts have not increased so rapidly as the engineers. They have increased much more rapidly than the population, however, and still substantially outnumber the engineers. Notably the group concerned with the various branches of the healing arts is numerically much the most important of the four. It is more than double its nearest rival.

In view of the manifold activities in which practising lawyers engage, it is believed that this comparison between the four occupational groups as a whole is more significant than a comparison between lawyers proper (excluding abstractors, nota-

[1] Including judges and justices. [2] Decrease.

ries, and justices of the peace), physicians and surgeons proper, clergymen proper, and the separate engineering branches. Those who prefer to define the professions, however, in terms, not of their general spheres of activity, but of their traditional division into more or less adequately organized self-conscious groups, will find in the above tables figures suitable for their purposes.

BAR ADMISSION RULES

The following are the principal changes that have occurred since the last Annual Report, and as late as October 1, 1923.[1]

1. *General Education*

In the spring of 1921 — previous, in other words, to the adoption of the recent American Bar Association and Washington Conference resolutions — Kansas required applicants for examination in June, 1925, and later, to show, in addition to the equivalent of a four-year high school course, the equivalent of two years' study in a general college course. The intention of the State Board of Law Examiners was that this general education should be secured prior to the beginning of the three-year period of law study. So far as concerns office students, this was ensured by a provision under which such students were required to register at the beginning of their period of study, and to present at this time proof of the requisite general education. Since January, 1922, only students who possess two years of college work, or an education regarded by the Board as equivalent, have been thus registered. Law school students, on the other hand, are not required to register. The Board therefore has no check upon such students until they come up for their final examination. Since the rules do not require, in terms, that such students shall have completed their general education before beginning their period of law study, Washburn College, which maintains one of the two local law schools, last year admitted the bulk of its new law students to a so-called five-year law course, constituted as follows: For admission, four years of high school work was required; the first three years of the course embraced the content of two years of college work and of one year of law work; the last two years consisted of law work exclusively. Since these students started their studies in good faith, it is probable that when they graduate, in 1927, they will be permitted to take the bar examination. In any case, so long as the Board permitted a local law school to be conducted on this plan, it seemed impossible last year to list this state among those that insist that applicants must secure the required amount of general education before beginning their period of law study.

Beginning with this year, however, Washburn announces only a three-year law

[1] For discussion of the situation in the spring of 1922, see *Seventeenth Annual Report* (1922), pp. 71–77, 86–90. Changes announced by Illinois and Colorado, in October and November, 1923, will be discussed in next year's *Annual Report*.

course, for admission to which two years of college work are required. It is still not entirely clear whether students from law schools situated outside the state may not claim the privilege of taking the bar examination if they can show that they have secured the equivalent of two years of college work at any time before they come up for examination. The number of such applicants will be small, however, compared with the number that enter from local schools or offices. Kansas may now fairly claim the distinction of having the highest requirements of general education in the country, and of having in this respect led, rather than followed, the action of the American Bar Association, as modified by the Washington Conference on Legal Education.

No other state at present conforms to the standard of general education set by the Conference, and the great majority do not call for even a preliminary high school education. Only four states have increased their minimum requirements during the year. Montana demands the equivalent of two years of college, but not necessarily before the beginning of the period of law study. Ohio has greatly stiffened its requirement of a high school education, notably by making it preliminary to the period of law study, and by coupling it with a registration provision applicable to all residents of the state, wherever they may be prosecuting their legal studies. Pennsylvania has long required applicants, before beginning their law studies, either to show, by examination, that they have a general education roughly equivalent to that furnished by a high school, or to present evidence of having secured an acceptable academic degree. Applicants registering on the basis of the preliminary examination, but not degree-holders, have been required to show a certain knowledge of Latin. The Latin requirement has now been increased, and must be satisfied by everybody. This is the only state that positively requires any knowledge of Latin. Finally, Louisiana has begun to require a high school education.

2. Duration and Location of Law Study

The American Bar Association and Washington Conference resolutions recommended, in effect, that the law office, as a substitute for the law school avenue of preparation, should be abolished; that in the case of law school students who devote substantially all of their working time to their studies, the period of law study should be three years; and that in the case of law school students who devote only part of their working time to their studies, there should be a longer period, "equivalent in the number of working hours."

The recommendation that the law office method of preparation should be abolished has found no favor. Every state continues to admit to its bar examinations applicants who have never been inside a law school; five states continue to insist that a minimum portion of the prescribed period must be spent in a law office; and of these states one, New Jersey, has now increased this minimum from nine months to twelve.

A three-year period of study is required in over half the states. Many states

are still satisfied with a shorter period, however, or with no period at all. During the past year there has been no improvement in this respect, so far as concerns full-time students.

The last recommendation of the Conference, affecting part-time students, had been followed, a year ago, only to the extent that three states demanded four years in an evening law school, as against three years in a day law school. Ohio, during the year, instituted a requirement of four years of study in the case of students "from a law school where the entire time of the student is not devoted to the study of legal subjects." This is a much better definition of the type of institution that should be distinguished from the standard three-year, full-time law school, but it can hardly be maintained that self-supporting students, in general, have in four years as much time available for study as other students have in three. It is indeed most difficult, if not impossible, to compute the precise amount by which the course of any evening or afternoon law school would have to be extended, in order to be made "equivalent in the number of working hours" to three years of full-time work. Rhode Island has adopted a cautiously worded rule to the effect that it will rate certain schools on its list as of "fractional standing and efficiency," and will give credit for periods of study therein accordingly.

Finally, the State of Washington has initiated a somewhat different line of development from that followed elsewhere. A high school education is all that is positively required prior to beginning the study of the law. If the applicant has no more than this, however, it appears that the period of study required in an approved law school (three years in a day school and four years in an evening school) must be supplemented by a year in a law office.

3. Diploma Privilege

Both the American Bar Association and the Washington Conference condemned the privilege enjoyed by graduates of certain law schools, in fifteen states, of securing admission to the bar without passing an independently conducted bar examination. No state in which this privilege existed abolished it during the year. Texas extended it to include both of the two local schools, as well as a short list of schools situated in other states.

The following table summarizes the salient educational features in the bar admission rules of the several states, in so far as they affect applicants not already admitted to practice in another jurisdiction.

Rules for Admission to the Bar in effect in the Summer of 1923

	General Education	*Law Study*	*No. of Law Schools Graduates of which are exempted from Educational Tests*
Alabama	Not mentioned in rules	Eighteen months	1
Arizona	Mentioned, but no specific requirement	Mentioned, but no specific requirement	1
Arkansas	Not mentioned in rules	Not mentioned in rules	0
California	Not mentioned in rules	Three years in a day law school, or in full-time work in a law office, or in a correspondence school or in private study; four years in an evening law school	0
Colorado	Equivalent of high school, prior to beginning law study	Three years	0
Connecticut	Equivalent of high school, prior to beginning law study	Three years	0
Delaware	Equivalent of high school, prior to beginning law study	Three years[1]	0
Dist. of Columbia	Not mentioned in rules	Three years	0
Florida	Not mentioned in rules	Mentioned, but no specific requirement	2
Georgia	Not mentioned in rules	Not mentioned in rules	4
Idaho	Equivalent of high school, prior to taking bar examination	Mentioned, but no specific requirement	0
Illinois	Equivalent of high school, prior to beginning law study	Three years	0
Indiana	Not mentioned in rules	Not mentioned in rules	0
Iowa	Equivalent of high school, prior to taking bar examination	Three years	0
Kansas	Equivalent of two years college, prior to beginning law study	Three years in approved law school, or in full-time office work	0
Kentucky	Mentioned, but no specific requirement	Two years	0
Louisiana	Equivalent of high school, prior to taking bar examination	Three years	3
Maine	Not mentioned in rules	Three years	0
Maryland	Equivalent of high school, prior to beginning law study	Three years	0
Massachusetts	Equivalent of two years evening high school, prior to taking bar examination	Three years full-time work in a day law school or in a law office, four years in an evening law school	0
Michigan	Equivalent of high school, prior to beginning law study, except that a deficiency of 25% is permitted to law school students	Three years in a law school or four years in a law office	0
Minnesota	Evidence satisfactory to the board, prior to taking bar examination	Three years	0
Mississippi	Equivalent of high school, prior to taking bar examination	Not mentioned in rules	1

[1] Of this, at least six months in a law office.

	General Education	*Law Study*	*No. of Law Schools Graduates of which are exempted from Educational Tests*
Missouri	Common school education and fair knowledge of civil government, literature, and history, prior to taking bar examination	Mentioned, but no specific requirement	0
Montana	Equivalent of two years college, prior to taking bar examination	Two years (24 months)	1
Nebraska	Equivalent of three years high school, prior to taking bar examination	Three years	2
Nevada	Mentioned, but no specific requirement	Mentioned, but no specific requirement	0
New Hampshire	Mentioned, but no specific requirement	Three years	0
New Jersey	Equivalent of high school, prior to beginning law study	Three years[1]	0
New Mexico	Mentioned, but no specific requirement	Two years	0
New York	Equivalent of high school, prior to beginning law study	Three years for college graduates, four years for others[2]	0
North Carolina	Not mentioned in rules	Two years	0
North Dakota	Not mentioned in rules	Three years	0
Ohio	High school education, prior to beginning law study	Three years in a full-time law school, four years in a part-time law school or in a law office	0
Oklahoma	Equivalent of high school, prior to taking bar examination	Two years	1
Oregon	Evidence satisfactory to the board prior to taking bar examination	Three years	0
Pennsylvania	Equivalent of high school, including college entrance Latin, prior to beginning law study	Three years	0
Rhode Island	Equivalent of high school, prior to beginning law study	Two years for college graduates, three years for others, or a longer period in the case of schools rated as not of full standing or efficiency[3]	0
South Carolina	Equivalent of high school, prior to taking bar examination	Two years	1
South Dakota	Equivalent of high school, prior to taking bar examination	Three years	1
Tennessee	Equivalent of high school, prior to beginning law study	One year	0
Texas	Evidence satisfactory to the board, prior to taking bar examination	Two years	14
Utah	Mentioned, but no specific requirement	Three years	1

[1] Of this, at least twelve months in a law office.

[2] Of this, except in the case of applicants having two years of college training, at least one continuous year in a law office.

[3] Of this, at least six months in a law office,

	General Education	*Law Study*	*No. of Law Schools Graduates of which are exempted from Educational Tests*
Vermont	Equivalent of high school, prior to beginning law study	Three years[1]	
Virginia	Mentioned, but no specific requirement	Two years for minors or for non-residents studying in local law schools; no requirement for others	0
Washington	Equivalent of high school, prior to beginning law study	Three years in an approved day law school, or four years in an approved evening law school, but in case no degree has been received an additional year must be spent in a law office. Four calendar years in a law office. Such credit is given for study not covered by these rules as will maintain the same standards	0
West Virginia	Equivalent of high school, prior to beginning law study	Three years in approved law school or in full-time office work	1
Wisconsin	Equivalent of high school, prior to taking bar examination	Three years	1
Wyoming	Mentioned, but no specific requirement	Three years	0

SUMMARY

States which prescribe a definite amount of general education and, following this, a definite period of law study	*Diploma privilege?* *No*	*Yes*	*Total*
Two years college or equivalent, followed by law study during			
Three years[2]	1	0	1
High school or equivalent, followed by law study during			
Three or four or five years[3]	1	0	1
Three or four years[4]	3	0	3
Three years or more[5]	0	1	1
Three years[6]	8	0	8
Two or three years, or more[7]	1	0	1
One year[8]	1	0	1
	15	1	16

[1] Of this, at least six months in a law office.
[2] Kansas.
[3] Washington.
[4] Michigan, New York, Ohio. In New York applicants not having two years college must spend part of this period in a law office.
[5] West Virginia.
[6] Colorado, Connecticut, Illinois, Maryland, Pennsylvania, Delaware, New Jersey, Vermont. In the last three, part of this period must be spent in a law office.
[7] Rhode Island. Part of this period must be spent in a law office.
[8] Tennessee.

States which prescribe a definite amount of general education and also, but not necessarily following this, a definite period of law study	*Diploma privilege?* *No*	*Yes*	*Total*
Two years college or equivalent, and law study during			
Two years (twenty-four months)[1]	0	1	1
High school or equivalent, and law study during			
Three years[2]	1	3	4
Two years[3]	0	2	2
Lower or vague requirement of general education, and law study during			
Three years or more, or four years[4]	1	0	1
Three years[5]	2	1	3
Two years[6]	0	1	1
	4	8	12
States which prescribe a definite amount of general education, but no definite period of law study			
High school or equivalent[7]	1	1	2
Lower requirement[8]	1	0	1
	2	1	3
States which prescribe a definite period of law study, but no definite amount of general education			
Three or four years[9]	1	0	1
Three years[10]	5	1	6
Two years[11]	3	0	3
Eighteen months[12]	0	1	1
	9	2	11
States which prescribe neither a definite amount of general education nor a definite period of law study			
Both features mentioned in rules[13]	2	2	4
Neither feature mentioned in rules[14]	2	1	3
	4	3	7
Total number of jurisdictions	34	15	49

LAW SCHOOLS

In the field of law schools there has been greater progress than in that of bar admissions. Under the recently amended Articles of the Association of American Law Schools, candidates for the degree, after September 1, 1923, must present for admission one year of college work. Fourteen schools that heretofore have admitted high

[1] Montana.
[2] Iowa, Louisiana, South Dakota, Wisconsin.
[3] Oklahoma, South Carolina.
[4] Massachusetts.
[5] Minnesota, Nebraska, Oregon.
[6] Texas.
[7] Idaho, Mississippi.
[8] Missouri.
[9] California.
[10] District of Columbia, Maine, New Hampshire, North Dakota, Utah, Wyoming.
[11] Kentucky, New Mexico, North Carolina.
[12] Alabama.
[13] Arizona, Florida, Nevada, Virginia. In Virginia two years law study are prescribed for certain types of applicants.
[14] Arkansas, Georgia, Indiana.

school graduates to their degree course have accordingly announced a one-year college requirement for the coming year;[1] though in some of these cases it is not clear that equivalents will not be accepted, of a character that is not sanctioned by the Association rule. Moreover, seven schools that already required one year of college, or that required two years of college for graduation but not for admission to regular standing, have raised their requirements to a full preliminary two years.[2] The total number of full-time schools that comply with American Bar Association standards in this respect (including again several doubtful cases) has in consequence been increased to 44 out of a total of 149, or 30 per cent.[3] Other changes that may be noted are the following: The University of Pittsburgh has abolished its combined course and now ranks with Harvard, Pennsylvania, and Northwestern as having the highest entrance requirements. Stetson University (Florida) has lengthened its full-time course from two years to three. Several Ohio schools, following the recent change in bar admission rules, have extended their part-time course from three years to four. George Washington has lengthened its course for part-time students. Chattanooga no longer announces that capable students may cover its three-year course in two years, and has accordingly been removed from the diminishing group of two-year schools. Two part-time schools have been removed from the list of degree-conferring schools. Of these, Webster (Chicago) is a casualty; the school formerly maintained by Birmingham-Southern College has been cast adrift by the College, and although it continues to be conducted, under the auspices of the Y. M. C. A., seems to grant no degree. Four new part-time schools have been added: Jefferson School of Law, Dallas, Texas (opened 1920); Virginia Union University, Richmond (opened 1922); College of St. Thomas, St. Paul, Minnesota; Houston Y. M. C. A., Texas.

The tables immediately following show, over a period of years, the number of schools, actual and relative, within each of the six broad groups into which they may be conveniently divided, from the point of view of the time required to secure the degree; and likewise the attendance in each of these groups. After this will be found a list of schools in operation during the coming academic year, with symbols attached showing the variations in this respect in greater detail. Finally a concluding Summary shows the manner in which these symbols are combined to produce the groups as constituted for this year.

[1] Catholic, Georgetown, George Washington, Florida, Mercer, De Paul, Boston, Mississippi, Willamette, South Carolina, Furman, Vanderbilt, Richmond, Marquette.

[2] Denver, Washburn, Louisiana, Washington University (Missouri), Oklahoma, Utah, Washington and Lee.

[3] The University of Denver School of Law, which has now raised its entrance requirements to two college years, resembles the University of Pittsburgh School of Law in that the class-room sessions are not held during the regular working hours of the day. In both cases, however, the majority of the students who do not give their entire time to the work of the school seem to be engaged in law offices. Both institutions are described in the appended list by the symbol A, but are included in the concluding Summary among the group of full-time schools.

LAW SCHOOLS GROUPED ACCORDING TO THE AMOUNT OF TIME REQUIRED TO SECURE THE DEGREE AFTER THE HIGH SCHOOL

	1889–90	*1899–1900*	*1909–10*	*1919–20*	*1920–21*	*1921–22*	*1922–23*	*1923–24*
Full-time schools requiring								
More than five academic years	0	2	5	10	11	11	11	11
Five academic years	0	0	3	18	20	21	27	33
Three or four academic years	6	24	35	34	33	35	30	26
Part-time schools requiring three or more academic years	1	19	32	56	62	61	57	57
Mixed full-time and part-time schools	0	2	9	8	8	12	16	16
Schools having a law course of less than three academic years	54	55	40	19	15	9	8	6
Total	61	102	124	145	149	149	149	149

Percentage of Total Number of Law Schools

Full-time schools requiring								
More than five academic years	0.0	2.0	4.0	6.9	7.4	7.4	7.4	7.4
Five academic years	0.0	0.0	2.4	12.4	13.4	14.1	18.1	22.1
Three or four academic years	9.8	23.5	28.2	23.4	22.1	23.5	20.1	17.4
Part-time schools requiring three or more academic years	1.6	18.6	25.8	38.6	41.6	40.9	38.3	38.3
Mixed full-time and part-time schools	0.0	2.0	7.3	5.5	5.4	8.1	10.7	10.7
Schools having a law course of less than three academic years	88.5	53.9	32.3	13.1	10.1	6.0	5.4	4.0
	100%	100%	100%	100%	100%	100%	100%	100%

LAW SCHOOL ATTENDANCE CLASSIFIED BY TYPE OF SCHOOL

	1889–90	*1899–1900*	*1909–10*	*1919–20*	*1920–21*	*1921–22*	*1922 (Nov.)*
Full-time schools requiring							
More than five academic years	0	761	1,671	3,407	3,733	4,201	3,965
Five academic years	0	0	751	2,307	2,635	3,349	4,022
Three or four academic years	1,192	3,992	5,946	4,585	4,823	5,008	4,423
Part-time schools requiring three or more academic years	108	2,251	4,787	9,163	10,902	11,658	11,804[1]
Mixed full-time and part-time schools	0	704	1,963	3,087	3,567	7,082	8,795[2]
Schools having a law course of less than three academic years	3,186	4,676	4,310	1,525	1,399	711	710[3]
Total	4,486	12,384	19,428	24,074	27,059	31,999	33,719

Percentage of Total Law School Attendance

	1889–90	*1899–1900*	*1909–10*	*1919–20*	*1920–21*	*1921–22*	*1922 (Nov.)*
Full-time schools requiring							
More than five academic years	0.0	6.1	8.6	14.2	13.8	13.1	11.8
Five academic years	0.0	0.0	3.9	9.6	9.7	10.5	11.9
Three or four academic years	26.6	32.2	30.6	19.0	17.8	15.7	13.1
Part-time schools requiring three or four academic years	2.4	18.2	24.7	38.1	40.3	36.4	35.0
Mixed full-time and part-time schools	0.0	5.7	10.1	12.8	13.2	22.1	26.1
Schools having a law course of less than three academic years	71.0	37.8	22.2	6.3	5.2	2.2	2.1
	100%	100%	100%	100%	100%	100%	100%

[1] Late afternoon, etc., 1862; evening, 9942.
[2] Morning sessions, 2311; late afternoon, 3507; evening, 2977.
[3] Morning, 254; late afternoon, etc., 23; evening, 433.

Residential Degree-Conferring Law Schools in operation, 1923–24

The following list of law schools is given in form similar to that employed in successive Annual Reports, beginning with that published in 1920. The conventional symbols attached to each school measure roughly the extent of its *prima facie* compliance with the three standards, affecting the amount of time devoted by students to their work, that have been formulated by the American Bar Association. That is to say, the roman numerals show the number of college years that are required for admission to regular standing as candidate for a degree, without regard to the important complications produced by the admission of special students, etc., or of regular students with entrance conditions. An asterisk means that a college degree is required for admission. The letter M (morning) denotes that class-room sessions are held during the regular working hours of the day, and that therefore students are, or may be, required to devote to their studies all of their time not needed for necessary recreation; while the letters A and E denote that class-room sessions are held at other hours, more generally convenient for self-supporting students. The arabic numerals show the duration of the law school course, in academic years or their equivalent. When separate divisions are conducted at different hours of the day, the requirements for each are stated in full, separated by commas. If no degree can be secured in the part-time division, its requirements are included within parentheses.

The list is restricted to schools that confer first degrees in law, because of the practical impossibility of drawing any other objective line between a "law school" and a fleeting "law class" conducted by one or more attorneys.

	ALABAMA	
Tuscaloosa	University of Alabama, School of Law	M3
	ARIZONA	
Tucson	University of Arizona, School of Law	IM3
	ARKANSAS	
Little Rock	Arkansas Law School	E2
	CALIFORNIA	
Berkeley	University of California, School of Jurisprudence	IIM4 or IIIM3
Los Angeles	Loyola College, The St. Vincent School of Law	E4
	University of Southern California, Law School	IIM3, IIE5
	Southwestern University, School of Law	M3, E4
Palo Alto	Stanford University, The Law School	IIM4 or IIIM3[1]
Sacramento	Sacramento Law School	E4
San Francisco	University of California, Hastings College of the Law	IIM3
	St. Ignatius College, The College of Law	E4
	San Francisco Law School	E4
	Y. M. C. A., Golden Gate College, School of Law	E4½
Santa Clara	University of Santa Clara, Institute of Law	IIE3

[1] College work beyond the second year may be taken concurrently with law work.

	COLORADO	
Boulder	University of Colorado, School of Law	IIM3
Denver	University of Denver, School of Law	IIA3[1]
	Westminster Law School	E3
	CONNECTICUT	
New Haven	Yale University, School of Law	IIIM3 or IIIM4
	DISTRICT OF COLUMBIA	
Washington	The Catholic University of America, The School of Law	IM3
	The Frelinghuysen University, John M. Langston School of Law (*colored*)	AE3
	Georgetown University, School of Law	IM3, IA3
	George Washington University, Law School	IM3, IA3+[2]
	Howard University, School of Law (*colored*)	AE3
	National University Law School	E3
	Washington College of Law	A3
	Y. M. C. A., College of the District of Columbia, School of Law	E3
	FLORIDA	
De Land	John B. Stetson University, College of Law	M3
Gainesville	University of Florida, College of Law	IM3
	GEORGIA	
Athens	University of Georgia, Law Department	M3
Atlanta	Atlanta Law School	E2
	Emory University, Lamar School of Law	IIM3
Macon	Mercer University, The School of Law	IM3
	IDAHO	
Moscow	The University of Idaho, The College of Law	IM3
	ILLINOIS	
Bloomington	Illinois Wesleyan University, College of Law	A3
Chicago	Chicago Kent College of Law	E3
	Chicago Law School	A3, E3
	De Paul University, College of Law	IM3, IE4
	The John Marshall Law School	E3
	Loyola University, School of Law	IIM3, E4
	Mayo College of Law	A3, E4
	Northwestern University, School of Law	*IIIM3 or IIIM4
	The University of Chicago, The Law School	IIIM3
Springfield	Lincoln College of Law	E3
Urbana	University of Illinois, College of Law	IIM3 or IIM4

[1] Students not devoting their entire time to the school are usually employed in law offices.

[2] Part-time students must remain from six to eighteen additional weeks, according to the scholarship displayed.

	INDIANA	
Angola	Tri-State College, College of Law	A2
Bloomington	Indiana University, School of Law	IIM3
Indianapolis	Benjamin Harrison Law School	E2
	University of Indianapolis, Indiana Law School	M3
Notre Dame	University of Notre Dame, The College of Law	IM3
Valparaiso	Valparaiso University, The Law School	M3
	IOWA	
Des Moines	Drake University, The College of Law	IIM3
Iowa City	The State University of Iowa, College of Law	IIM3
	KANSAS	
Lawrence	University of Kansas, School of Law	IIM3
Topeka	Washburn College, The School of Law	IIM3
	KENTUCKY	
Lexington	University of Kentucky, College of Law	IM3
Louisville	Jefferson School of Law	E2
	Simmons University, Central Law School (*colored*)	A3
	University of Louisville, School of Law	A3
	LOUISIANA	
Baton Rouge	Louisiana State University, The Law School	IIM3
New Orleans	Loyola University, School of Law	E3
	Tulane University of Louisiana, College of Law	IM3
	MARYLAND	
Baltimore	The University of Maryland, The School of Law	E3
	MASSACHUSETTS	
Boston	Boston University, The School of Law	IM3
	Y. M. C. A., Northeastern University, School of Law	E4
	Portia Law School	A4, E4
	Suffolk Law School	E4
Cambridge	Harvard University, The Law School	*IIIM3
Springfield	Y. M. C. A., Northeastern University, School of Law, Springfield Division	E4
Worcester	Y. M. C. A., Northeastern University, School of Law, Worcester Division	E4
	MICHIGAN	
Ann Arbor	University of Michigan, Law School	IIM3 or IIM4
Detroit	University of Detroit, Law School	IM3, (A3)
	Y. M. C. A., Detroit College of Law	A3, E3

	MINNESOTA	
Minneapolis	Minnesota College of Law	E3
	Northwestern College of Law	E3
	University of Minnesota, The Law School	IIM3
	Y. M. C. A., Law School of Minneapolis	E4
St. Paul	St. Paul College of Law	E4
	College of St. Thomas, College of Law	IIA3
	MISSISSIPPI	
Oxford	University of Mississippi, School of Law	IM3
	MISSOURI	
Columbia	The University of Missouri, The School of Law	IIM3
Kansas City	Kansas City School of Law	A4, E4
St. Louis	Benton College of Law	E4
	City College of Law and Finance, School of Professional Law	A3, E3
	St. Louis University, Institute of Law	IIM3, IIE4
	Washington University, The School of Law	IIM3
	MONTANA	
Missoula	University of Montana, The School of Law	IIM3
	NEBRASKA	
Lincoln	The University of Nebraska, College of Law	IIM3
Omaha	The Creighton University, College of Law	IIM3, (E4)
	University of Omaha, Omaha School of Law	E4
	NEW JERSEY	
Newark	New Jersey Law School	M3, A3, E3
	NEW YORK	
Albany	Union University, Albany Law School	M3
Buffalo	The University of Buffalo, School of Law	M3
Ithaca	Cornell University, The College of Law	IIM3
New York City	St. Lawrence University, Brooklyn Law School	M3, A3, E3
	Columbia University, School of Law	IIIM3
	Fordham University, School of Law	M3, A3, E3
	New York Law School	A3, E3
	New York University, School of Law	M3, A3, E3
Syracuse	Syracuse University, College of Law	IIM3
	NORTH CAROLINA	
Chapel Hill	The University of North Carolina, School of Law	IIM3
Durham	Trinity College, School of Law	IIM3
Wake Forest	Wake Forest College, School of Law	IM3
Wilmington	Wilmington Law School	E3

	NORTH DAKOTA	
Grand Forks	The University of North Dakota, The School of Law	IIM3
	OHIO	
Ada	Ohio Northern University, College of Law	M3
Cincinnati	St. Xavier College, College of Law	E4
	University of Cincinnati, College of Law	IIM3
	Y. M. C. A., Night Law School	E4
Cleveland	Baldwin-Wallace College, The Cleveland Law School	A4, E4
	Western Reserve University, The Franklin Thomas Backus Law School	IIIM3
	The John Marshall School of Law	M4, A4, E4
	Spencerian School, Lake Erie School of Law	E4
Columbus	The Ohio State University, College of Law	IIM3
	Y. M. C. A., The Columbus College of Law	E4
Toledo	St. John's University, Law Department[1]	E4
Youngstown	Y. M. C. A., The Youngstown Institute of Technology, The Youngstown School of Law	E4
	OKLAHOMA	
Norman	University of Oklahoma, The School of Law	IIM3
	OREGON	
Eugene	The University of Oregon, School of Law	IIM3
Portland	Northwestern College of Law	E4
Salem	Willamette University, College of Law	IA3
	PENNSYLVANIA	
Carlisle	Dickinson College, The Dickinson School of Law	M3
Philadelphia	Temple University, School of Law	E4
	University of Pennsylvania, The Law School	*IIIM3
Pittsburgh	Duquesne University, School of Law	E3
	University of Pittsburgh, School of Law	*IIIA3[2]
	RHODE ISLAND	
Providence	Y. M. C. A., Northeastern University, School of Law, Providence Division	E4
	SOUTH CAROLINA	
Columbia	University of South Carolina, School of Law	IM3
Greenville	Furman University, Law Department	IM3

[1] New students are admitted only to the third-year and fourth-year classes.
[2] Students not devoting their entire time to the school are usually employed in law offices.

	SOUTH DAKOTA	
Vermillion	University of South Dakota, School of Law	IIM3
	TENNESSEE	
Chattanooga	Chattanooga College of Law	E3
Knoxville	The University of Tennessee, College of Law	IM3
Lebanon	Cumberland University, Law School	M1
Memphis	University of Memphis, Law School	E3
Nashville	Vanderbilt University, The Law School	IM3
	TEXAS	
Austin	University of Texas, School of Law	IIM3
Dallas	The Jefferson School of Law	E3
Houston	Y. M. C. A., South Texas School of Law	E4
Waco	Baylor University, Department of Law	IM3
	UTAH	
Salt Lake City	University of Utah, The School of Law	IIM3
	VIRGINIA	
Charlottesville	The University of Virginia, Department of Law	IIM3
Lexington	Washington and Lee University, School of Law	IIM3
Richmond	University of Richmond, The T. C. Williams School of Law	IM3, IE4
	Virginia Union University, Law Department (*colored*)	E4
	WASHINGTON	
Seattle	University of Washington, School of Law	IIM3
Spokane	Gonzaga University, School of Law	IIE4
	WEST VIRGINIA	
Morgantown	West Virginia University, The College of Law	IM3
	WISCONSIN	
Madison	The University of Wisconsin, Law School	IIM3 + [1]
Milwaukee	Marquette University, Law School	IM3, (E4)
	WYOMING	
Laramie	University of Wyoming, The Law School	IIM3

[1] Three additional months of law school or six months of office study are also required.

SUMMARY

Full-time Schools Requiring

More than five academic years

*IIIM3	2	
*IIIM3 or IIIM4	1	
*IIIA3[1]	1	
IIIM3 or IIIM4	1	
IIIM3	3	
IIM4 or IIIM3	1	
IIM4 or IIIM3[2]	1	
IIM3+	1	11 (7%)

Five academic years

IIM3 or IIM4	2	
IIM3	30	
IIA3[1]	1	33 (22%)

Three or four academic years

IM3	17	
M3	9	26 (17%)

Part-time Schools Requiring Three or More Academic Years

IIA3	1	
IA3	1	
A4, E4	3	
A3, E4	1	
A3	4	
A3, E3	4	
AE3	2	
IIE4	1	
E4½	1	
E4	23	
IIE3	1	
E3	15	57 (38%)

Mixed Full-time and Part-time Schools

IIM3, IIE5	1	
IIM3, IIE4	1	
IIM3, E4	1	
IIM3, (E4)	1	
IM3, IA3+	1	
IM3, IA3	1	
IM3, (A3)	1	
IM3, IE4	2	
IM3, (E4)	1	
M3, E4	1	
M4, A4, E4	1	
M3, A3, E3	4	16 (11%)

Schools having a Course of Less than Three Academic Years

Full-time schools

M1	1	

Part-time schools

A2	1	
E2	4	6 (4%)

Total number of schools 149 (100%)

I, II, III, denote the minimum number of academic years that must have been spent in a college in order to secure admission to regular standing as candidate for a degree; *, that a college degree must have been obtained.

M (morning) denotes that the class-room sessions are held during the regular working hours of the day; A, that they are held during the afternoon or at other daytime hours convenient for self-supporting students; E, that they are held during the evening.

1, 2, 3, 4, 5, denote the minimum number of academic years residence that are required (or their equivalent in "terms" or "quarters") to complete the law course.

( ) denote that no degree is given for work of this character.

The symbols in all cases denote the requirements in force at the beginning of the academic year 1923–24. Announcements of subsequent changes are not included.

[1] Students not devoting their entire time to the school are usually employed in law offices.

[2] College work beyond the second year may be taken concurrently with law work.

RESTATEMENT OF AMERICAN LAW

An event of great prospective importance was the organization on February 23, 1923, in Washington, D. C., of the American Law Institute, by a very large and representative assembly of judges, practising lawyers, and law teachers. The object of the movement may be briefly stated as follows. At present, in order that judges and lawyers may ascertain the existing law in regard to any point, they are obliged to take into consideration not merely the constitution, the legislative statutes, and the prior judicial decisions of their own state and of the federal government, but also the judicial decisions rendered in other states. These decisions are now so abundant, and so confused, that the task of finding all that are applicable to any given case, and of reconciling their mutual inconsistencies when found, is all but impossible, when attempted under the pressure of current legal practice. The American Law Institute has assumed the responsibility of gradually clearing up this confusion. It proposes to state, in systematic form, for successive branches of the law, the underlying principles exemplified in the better decisions. Its aim is not to question the authority of the highest court of each state to determine and declare, subject to constitutional and legislative provisions, the law that is to be regarded as in force within its own jurisdiction. By putting into the hands of the courts, however, a reasoned exposition of the best prevailing line of decisions in other states, it hopes greatly to reduce the amount of *ad hoc* research that now devolves upon the judges, and upon the lawyers who practise under them. To the extent that the work commends itself to the legal profession as well done, it should become possible for the judiciary and bar of each state to confine their search for governing principles or precedents to constitutions, statutes, their own prior decisions, and the publications of the Institute, and to be freed from the obligation of themselves analyzing and criticizing the enormous body of judicial decisions that have been handed down in other states. How greatly this would lighten their labors can be best appreciated by those who try to extract the authoritative law of any jurisdiction from its present manifold sources.

It is obvious that a reform of this nature, if successfully carried through, will not only be of great service to judges and lawyers who are already engaged in practice, and through them to the community at large, but will also profoundly affect the work of the law schools in which our future judges and practitioners are trained. In this connection the following extracts from *Training for the Public Profession of the Law* may be quoted:

"It may be respectfully suggested to . . . opponents of technical law-reform that if they are satisfied with the present condition of American law, the community at large is not. Steps taken toward remedying its confusion are not likely to be attended with such immediate success as to place a strait-jacket upon the body politic. The danger is rather that unless some action is taken to clarify and simplify the hodgepodge of moss-grown precedent and popular petulance which courts and legislatures have fastened upon us, the people will destroy this ex-

isting law entirely,[1] with all its evil and with all its good, not distinguishing between its repellently mysterious shell and the core of justice and of truth that lies deeply concealed within it. This necessity for a technical reshaping of the law is entirely distinct from the question of what substantial changes are or are not also needed in order to bring it into harmony with the conditions under which we live to-day. This latter is a question of policy, as to which men will always disagree. But it is rather futile to argue for or against substantial changes in the law, when few of those affected by the proposed reforms have a clear idea, or can secure a clear idea, of what the present situation is. Discussion of new law cannot intelligently proceed, so long as existing law is virtually unintelligible."[2]

"The lengthening of the law school or bar admission period since 1870 has in no way kept pace with the growth of the law that has to be mastered. While a still further extension of the preparatory period, coupled with specialization on the part of the schools, will reduce the tension to some extent, and ultimately, it is to be hoped, the law itself can be reduced to more general and hence more easily mastered terms, it will be many years before any law school faculty or any board of bar examiners or court can defend its curriculum as an ideal one. All that can be maintained is that it is the best that can be devised under most unfavorable conditions."[3]

"The greatest service that case-method schools can render is consciously to endeavor, by a process that under the most favorable conditions must be painfully slow, to express American law in such a form that inordinate effort on the part of both students and teachers will no longer be required in order to produce the unsatisfactory results yielded to-day even by our best law schools."[4]

ALFRED Z. REED

November, 1923

THE STUDY OF DENTAL EDUCATION

THE study of dental education in Canada and the United States was inaugurated in 1921. It was continued throughout the past year and will soon be concluded. We have had, from the beginning, the cordial coöperation of each of the dental schools, and of each of the national organizations concerned with the promotion of dental education, in this country and in Canada.

All of the dental schools in Canada and the United States — then fifty-one in number — were visited during the academic year 1921–22. At each school detailed enquiry was made regarding its condition, aims, needs, and opportunities. Replies to enquiries were fully coöperative and responsive, almost invariably. The affairs of each school, and the scope and relationships of dental education, were discussed sympa-

[1] As, for instance, by inconsiderately substituting for it a comprehensive and super-simplified code.
[2] *Training for the Public Profession of the Law*, p. 349. [3] *Ibid.*, p. 275. [4] *Ibid.*, p. 388.

thetically and constructively with its officers, privately and in nearly every instance also at a meeting of its faculty. Suggestions of improvements were always received in the spirit of their presentation. This procedure, which was welcomed and encouraged by the officers of each dental school, inaugurated and developed general reconsideration of the problems of dental education, by the whole body of dental teachers. Discussion of these problems has been proceeding, with cumulative interest, throughout the past year — at the dental schools, and at the meetings of dental societies, in all parts of Canada and the United States. As a consequence, a relatively large number of dental schools have instituted significant improvements, many of which were made during the academic year 1922–23. Important changes are about to go into effect.

Completion of the general report on the study has been delayed somewhat by the desirability of continuing the "field work" a little longer than had been planned originally, so that the important improvements recently in progress might be studied in detail, their general significance noted, and their import stated. Twenty-one dental schools were re-visited during the past academic year. Several schools will be visited again in October, prior to publication of the general report early in the autumn, which will then be closely up-to-date in all its phases.

When the study was actively begun, in the fall of 1921, fourteen independent dental schools in the United States were frankly proprietary in character or were conducted on a plane that was obviously commercial. Of that group of dental schools, two have been absorbed by dental schools in universities; one has become a *new* integral part of a university; three have effected affiliations with universities that are expected to be initial steps to organic union; the owners of one are endeavoring actively to make the school an integral part of a university; five have been, or are about to be, transferred to boards of trustees of independent organizations that were formed to conduct the schools as non-proprietary educational institutions (altho the owners preferred, and the new organizations desire, to make these schools parts of universities); one has been closed; and only one — a grade-C concern — appears to expect to continue *as a proprietary school.* Accordingly, proprietary dental schools, which were important in 1921 as factors of demoralization in dental education, have become practically extinct. In addition, mercenary or indifferent management of dental schools by some universities has been very definitely discouraged and in notable instances discontinued.

The number of *independent* dental schools in the United States has dwindled, since 1921, from fourteen to seven, of which, as has just been indicated, only one continues to be proprietary. Of the total number of dental schools now existing in the United States (43), thirty-four are parts of universities and two are parts of associations of professional schools. Of the total number in the latter two groups (36), thirty-three are parts of institutions that contain undergraduate schools of medicine, with which the dental schools are, or could be, effectively coördinated. The five Canadian dental

schools are parts of, or are closely affiliated with, universities, each of which has a school of medicine.

The discussions that were initiated and maintained by the manner in which the study has been conducted, have also encouraged notable further general improvement in the quality of dental education. In the fall of 1921 only twenty of the fifty-one dental schools then existing in Canada and the United States required at least one year of college work for admission to the first-year class. Of that number, eighteen required it *for the first time in 1921*. Now, more than half the whole number of dental schools in Canada and the United States base the study of dentistry on an entrance requirement of at least one year of college work. By 1926, judging from numerous preliminary announcements, practically all the schools of dentistry will require at least one year of college work for admission, and ten or more will require at least *two* years of preliminary education of college grade. Montreal and Rochester Universities have announced a requirement of *three* years of college work for admission to the study of dentistry, beginning in 1925. Montreal will require four years, beginning in 1927.

Prior to the inauguration of the study, the dental schools in the United States had been organized in two general groups—the National Association of Dental Faculties and the Dental Faculties Association of American Universities. These two Associations, which were conducted in the main by the administrative officers of the dental schools, met annually and independently. In addition, *teachers* from all the dental schools in *Canada and the United States*, including the administrative officers that conducted the two independent organizations of "dental faculties" in this country, and the one in Canada, met annually as delegates to the American Institute of Dental Teachers—an international association for the advancement of teaching in dentistry. This anomalous situation was complicated, further, by the organization, early in 1921, of an "Administrative Council" within the latter body. It was hoped by some that this Administrative Council would replace (by absorption) the two "associations of dental faculties" in this country; by others it was believed that the Administrative Council would also eliminate (by disbandment) the Dental Educational Council of America. Disunion, disharmony, and disgust, in consequence of these discoördinations, stood in the way of deliberation, decision, and development.

It seemed, early in the progress of the study, that consolidation of all these organizations, including the Canadian Dental Faculties Association, would be a matter of prime importance for the promotion of dental education in North America. The idea of such a union was presented and explained frequently, and it was thoroughly and informally discussed widely, as we proceeded with the study. The proposal received unanimous approval. Last January the four national organizations named above, by unanimous vote of their representatives, in session at Omaha, discontinued their individual existences, by complete amalgamation into a new international body —the *American Association of Dental Schools*—which will hold its first meeting in

Cleveland in September. The objects of this Association are stated in its constitution as follows: "The American Association of Dental Schools has been established to facilitate intercourse and conference among *teachers* of the dental sciences and arts in North America; to promote advancement of *teaching* and research in American schools of dentistry; to encourage thorough study and discussion of the needs and problems of dental education; to improve public understanding and appreciation of the quality and value of dentistry; and to maintain dental education in full accord with the highest requirements of professional education in the public service."

The Dental Educational Council of America has been an important supervisory body in dental education. It has twenty-four members, eight of whom represent the associated dental *practitioners;* eight, the associated dental *examiners* (for license to practise dentistry), and eight, the associated dental *teachers* (dental schools). The Council has been classifying the dental schools in this country since 1916, and has published several revisions of its classification. The last revision since 1921 was announced on July 1, 1923. By courtesy of the Council we have been privileged to attend all its meetings since 1921, to note all the details of its procedure, and to study its official records. During the past year the Council held continuous sessions in October, December, and May, lasting, respectively, six, five, and four days, in very earnest attention to the duties entrusted to it by the leading organizations of dentists and dental teachers.

The most important general actions of the Dental Educational Council during the past year, in addition to its re-classification of the dental schools in the United States, were (*a*) publication of a revision of the "minimum requirements" for its Class-A rating, including one year of college work as a prerequisite for admission to the first-year class in 1926 and thereafter; (*b*) denial of its Class-A rating to all *proprietary* dental schools as such; and (*c*) adoption of a "point system" of rating dental schools, by which the Council's ratings can be determined with a high degree of accuracy in terms of criteria clearly and definitely agreed upon from time to time — and known in detail (hereafter) to all the schools to be classified by the Council.

Unexpected difficulty was encountered in the effort to obtain accurate copies of the current dental laws of each of the provinces and states of Canada and the United States. Meanwhile, many of these dental laws have been amended. Copies of the laws as lately amended are now available for early publication collectively, as had been planned.

The study has indicated that the primary need in dental education as a system, at the present stage of its evolution, is its early placement on a basis of scholastic *equality* with medicine, both in the character of the preliminary study required and in the depth and breadth of the scientific foundation afforded. Dentists and physicians should be able to coöperate intimately and effectively — they should stand on a plane of intellectual equality and should be able to "talk the same language." The dentist should obviously be educated to study his problems with a *medical mind* and

be trained to perform his special service with *medical understanding*. He should be equal to the physician in the quality of his service as a guardian of the health of individuals and of communities. His localized oral service should be rendered with full comprehension of the general relation of that service to the welfare of the body as a whole as well as to the bodily parts directly involved or immediately adjacent. He should comprehend the meaning of the oral signs of systemic disease and should give *advisory* health service accordingly.

The practice of medicine and the practice of dentistry are coördinate divisions of *health service*. They are like trees that have sprouted spontaneously from an old stump, the stump having long since disappeared—trees alike in kind and closely similar in appearance, growing somewhat divergently *from the same roots in a common soil*, through the same air of freedom and individual opportunity, in the same light, toward the sky.

Dentistry can no longer be accepted as mere tooth technology. Its function has risen to the dignity and importance of scientific *health service*. The developments of medical knowledge in general, and of dental science in particular, have made it obvious that the dentist should have the capacity of a physician in all the requirements of successful prevention, diagnosis, treatment, and cure of disease, as well as the skill and efficiency of the surgeon in the mechanical arts of adjustment, removal, restoration, and substitution. Trained technicians and assistants will always be needed for useful empirical service in coöperation with dentists, physicians, and sanitarians, and for the performance of the simpler mechanical tasks of dental art. If and when the supply of such assistants falls below the demand for them, the need can be appropriately met. What humanity now requires most of all, of "dental education," is an increasingly larger number of men and women who will practise *and develop* dentistry with the advantages of a broad preliminary education; with knowledge acquired on a solid foundation of study of the medical sciences; and with the capacity and skill derived from a thorough practical training in the arts of diagnosis, prevention, cure, and treatment of dental and oral disorders, with due regard for their systemic sequellae. There is a growing need, in short, for dentists who will be not only "dental surgeons," but *also dental physicians* and dental sanitarians.

There have been numerous indications of desire for extensions of the study to the dental schools in South America, Europe, and the Orient.

PART IV

THE TEACHER'S RESPONSIBILITY FOR OUR EDUCATIONAL INTEGRITY

THE TEACHER'S RESPONSIBILITY FOR OUR EDUCATIONAL INTEGRITY

The Rising Cost of Education

There was included in last year's report of the Carnegie Foundation a section under the caption given above. The paper has aroused much discussion among those concerned with education, not only among teachers and superintendents, but also among those who support education through taxation and among parents who are primarily interested in the quality, rather than the cost, of education.

Some of the criticisms of the paper have involved certain misapprehensions. They have been based upon the assumption that the paper was intended as an argument against the burden of a progressive cost of public education. A careful reading of the paper itself will make clear that this criticism is not justified. The paper called attention to the rapid rise in educational costs in the last decades, but it plainly set forth the fact that a progressive increase in the cost of education was both necessary and right. The matter upon which it laid stress was educational, rather than financial. It raised the question whether the rise in the cost of education was justifying itself by the results of that education as shown in the training of the pupils of the various branches of our educational system. The increasing cost of education and the ability of the public to pay for it were discussed only to make clear the importance of making sure that the vast sums expended for this purpose produce benefits of corresponding value for the children and youth of the nation. That the value to the community of a proper system of public education can hardly be measured in dollars and cents, all will agree. Whether our present system, however, as now developing, is one that the public ought to be called upon blindly to support, is a question that well merits examination.

The discussion has emphasized the need for thorough studies in educational financing. We need to know how a given educational unit—let us say a state—raises the money to support its schools. We need to know what relation this has to the whole burden of taxation which the state is called upon to carry, and how far this load is distributed over the state and its communities. This whole matter of educational finance, which has hitherto been very much in the air, is now being taken up from the standpoint of careful research, and we may confidently hope that within a reasonable time information will be forthcoming upon which a sound educational budget in any given community can be based.

It is clear from such studies as have already been made touching the cost of education that some difference of opinion is likely to be expressed as to what proportion of the income of a state, of a county, or of a city may reasonably be devoted to public education.

It is clear also that any discussion of an educational budget must take into account the other obligations of the community. It will be found in any state or community budget that the margin of income upon which school expenditures must be based is

not a direct function of the gross income, but rather a function of the income that remains after certain fixed charges have been paid. President Harding, in presenting his report for a national budget, pointed out very clearly how difficult had been the process of reducing expenses for the reason that the great bulk of the income of the government was pledged to certain fixed charges. Thus the interest on the public debt must be paid before any economies or new applications of the income could be made.

As matters stand in the civilized world to-day, assuming that those who work with their hands and with their brains receive a living wage for an honest day's work; and assuming also that there is a reasonable return in the way of interest to capital and in the way of salary to management, the primary needs of mankind—food, clothing, shelter, heat, and transportation—absorb the great bulk of the world's income. The measure of what a people can do in support of education is dependent, not upon the gross income of the nation, but upon the residue available after the primary needs of humanity have been met. The portion of income taken by taxation has been enormously increased in the last decade. To-day not only are the needs of education, of philanthropy, and of public charity hampered by this increase, but the industrial needs for investment are also feeling the serious burden of growing taxation. What, therefore, those who have to do with public education must consider, so far as the financial situation is concerned, is not the gross income of the country, but the income that remains after the primary wants of mankind have been met, and the heavy taxes to meet governmental fixed costs have been taken out. It is essential that those having to do with the support of education shall keep these considerations in mind.

The popular argument, that the cost of education need cause little apprehension so long as the American people expend enormous sums upon luxuries and pleasures, is one that has a certain attractiveness, but that leaves out of account fundamental facts of human nature. If our social order should advance to such a point that men voluntarily deprive themselves of luxuries and of unwise pleasures, humanity will have been so remade that the school system will have been remade with it. It would be magnificent if all Americans could be persuaded to give up unwise luxuries and pleasures and devote the sums thus expended to education. The difficulty in the process is that each of us is ready to give up the indulgences to which he is not devoted, but finds it difficult, if not impossible, to surrender his own pet luxuries. It will be recalled, perhaps, that some years ago a distinguished scholar published a paper setting forth in statistics the sums expended annually by the American people upon drink, tobacco, chewing-gum, and jewelry. A plea was made for the reduction of these unnecessary expenses for the benefit of the whole cause of public advancement. Unfortunately, it was found that even in academic gatherings each man held fast to his own luxury. Many a man found it easy to surrender chewing-gum and jewelry who could not bring himself to abstain permanently from rum and tobacco. The argument, that educational cost can be justified by the extravagances of mankind in the way of luxuries and of pleasure, has no sound basis.

In some measure the growing cost of public education is analogous to the rapidly mounting expenditure of the American people upon luxuries and pleasures. The cost of education in the last three decades represents not only the increases due to the growing number of students and the increase in the maintenance costs, but a very considerable proportion represents the increase in the number of subjects and activities. These do not represent, in all cases, the mature judgment of the teachers of the country as to what is wise and necessary. Many men and many groups of men have had their particular educational notions carried out in the addition of this or that subject or activity to the school program. The present-day expenditures in public education represent, in some cases at least, the luxuries of education as well as the sober judgment of what constitutes a fair opportunity of training for the American child. There may not be any tobacco or rum in these educational luxuries, but there is certainly some chewing-gum and jewelry. The essential thing is, in the case of any educational unit,—a state, a county, or a city,—to make a careful research into the nature of its fixed obligations, and to determine, in view of its great importance, the proportion that such state or community can give and ought to give for the education of its children, always keeping in mind the fact that no other expenditure is more important for the community than that of a sincere, intelligent, fruitful school system.

What is Education?

Assuming that the impending financial scrutiny provides an occasion for a reëxamination of our educational system to the end that the public system of education, including both tax-supported and endowed schools, may serve the true interests of the youth of the country and therefore of the country itself, I venture to call attention again to the specific propositions advanced in the last report of the Carnegie Foundation.

1. The total cost of public education has grown rapidly in the last two decades, and many communities, in view of the rapid rise in taxation, will find increasing difficulty in meeting this cost if it is to rise at a corresponding rate in the future.

2. The increase in the cost of education has come about not only through the growth of population and the corresponding increase in the number of students, but it has arisen in large measure by the addition to the curriculum of a great number of subjects and activities. The high school course of twenty years ago, for example, was of a simple cultural type. It now includes somewhere everything from typewriting to journalism.

3. The outcome of this process of expansion has been, not merely to add many new facilities, but to transform our conception of what the school can accomplish in behalf of civilization. In the process the disciplinary side of education has been almost lost, and the education offered in the school has become soft.

4. The great rush of numbers into our schools has been due to many causes, but in no small measure to an unsatisfied vocational impulse. The kind of vocational training, however, that the bulk of these young people need is not that given in the high school, but a sharp technical training such as would be given in a trade school.

5. The process of expansion has resulted in a regrettable dilution in the scale of pay of the teacher. The pay of the teacher in the tax-supported school can be on a fair scale only when the school accepts a definite field of activity within which it will do its work.

These were the real questions with which the section of the report of the Foundation entitled *The Rising Cost of Education* undertook to deal. They are all directly related to the question of cost; but they are essentially questions of educational sincerity and thoroughness. In my judgment, the interests of the country and of the teacher alike will be met by facing these questions fairly, frankly, and in good temper.

The essential qualities of a liberal education for a democracy have been nowhere better stated than by Dr. Arthur T. Hadley, in his *Economic Problems of Democracy*, in the following words:

> "We must make provision for giving the voters as a body the elements of a liberal education in the true sense of the word—an education which fits them for the exercise of *liberty*, civil and political.
>
> "This true meaning of a liberal education is so often misunderstood that it will perhaps come as a surprise to some of us to be reminded of it. In contrasting the liberally educated man with the technically educated man, we think of the former as having acquired knowledge and interest in many lines, while the latter confines his knowledge and interest to the few which bear on his profession or trade. But those who take this view miss the essential points and purposes involved. To begin with, education is not, except to a limited extent, an acquiring of knowledge. It is essentially a training of habits and powers. A good deal of knowledge is incidentally acquired in the course of this training; but such knowledge is an incident of the education, not its essential instrument or essential object. The difference between bad and good ideals of education may be summed up by saying that bad education teaches us to know, while good education teaches us to know *how*—how to find things, to judge things, and above all to do things. Technical education trains a man to find and judge and do what is necessary in his calling; liberal education trains him to find and judge and do what is necessary in the exercise of his liberty as a citizen.
>
> "The founders of the American commonwealth understood the importance of this sort of liberal education, and the necessity that every one of its members should have some of it in order to be trusted with rights of self-government and a share in the government of the community. One of their very first cares was to provide a system of public education under which every child should learn reading, writing, and arithmetic. This education did not go very far, but it went straight toward the mark. It put in the hands of American children powers that would enable them to take intelligent part in public business when they grew up. It did not undertake to give much knowledge of politics or economics; it left that to be acquired afterwards, in the jury box or the political campaign, from

the newspaper or the counting room. For this, it taught them to rely on themselves.

"The elementary schools developed under the influence of these ideas and purposes have continued down to the present day to be the most satisfactory part of the American public school system. Speaking broadly, they have given every boy his chance, and have made patriotic Americans out of nineteen-twentieths of the material that came into their hands, even though some of it was very unpromising. Our public high schools are for the most part of later origin and have had a wider aim; but they have not been equally successful in attaining it. They have tried to give the boys and girls who attended them many kinds of knowledge and training which would be interesting to them in school and useful in after life; but they have suffered in their efforts from two disadvantages, which in the state of public feeling at the middle of the last century were almost unavoidable. The first was the over-valuation of mere knowledge as compared with training; almost every parent wanted his boys taught *facts* on the subjects in which he himself was most interested, and was impatient of any educational system which left him ignorant of these facts. The second was the belief encouraged by Herbert Spencer that studies ought to be naturally interesting to the pupil, and the idea, for which it is not fair to hold Spencer responsible, that it was the duty of the teacher to make them so if they were not. Pupils trained under these influences in school or college—for our colleges were not exempt from these adverse influences—gained knowledge rather than power, breadth rather than accuracy or efficiency, habits of dependence rather than habits of self-reliance.

"It is this last point which shows the gravest defect of the system from a political standpoint. If breadth is purchased at the expense of self-reliance, the education is an illiberal one—an actual detriment to the exercise of civil liberty. The boy who has become accustomed to depend on the teacher for his knowledge in school tends to take his knowledge at second hand in after life. The boy who can study only what he likes in school is governed in after life by his likes and dislikes rather than by his reason."

I believe profoundly that in time we, as a people, will be able so to adjust our educational system as to correct whatever inequalities may have arisen by reason of the rapid growth of the last twenty years. The attention of our teachers has been directed during that period toward a policy of expansion. The time has now come when their thought and study must be given to the critical examination of the field already covered, to the elimination of those things that ought not to be retained, and to the coördination of all our efforts toward the development of a school system whose function and whose aim is clearly related to the needs of a democracy. Only by this process can the interests of all the people be preserved.

The relation of the present widespread curriculum to the true function of the school as an intellectual agency is tersely put, by one whose life has been spent in public education, in the following words:

"The elementary curriculum has expanded in recent years into a huge collection of knowledge and of activities. Nearly all the subjects suitable for children, and some others, have been gathered from all sources until both teachers and

children are overloaded with these bountiful gifts. At present they are staggering under the load.

"The last thirty years has been a period of almost reckless expansion of common-school studies into all the new and old realms of experience. It may require the next thirty years to sift out and organize these accumulated treasures."[1]

Professor McMurry, in this brief paragraph, touches a point which is very commonly raised by those who have been responsible in large measure for the enormous expansion of school subjects. Discussing the question of fiscal responsibility, "If it is proposed," say these gentlemen, "that we expend less upon public education, what part of our modern program is to be omitted? Shall we, for example," say they, "omit music and art and drawing and household and industrial arts, and other new subjects of the modern elementary school curriculum?" The question might include many other studies which have been added to the curriculum in some schools— dancing, typewriting, journalism, advertising, and other subjects, all good in themselves.

This objection must be met and met fairly and the answer is perfectly straightforward.

Almost every study of human relations, of human industry, and of human learning can be made fruitful if well taught. Furthermore, it is desirable that a child or a youth should have as generous a knowledge as is possible of the great forces and activities of the world. But it is humanly impossible to include in a school curriculum all the interesting subjects that touch human life. When the attempt is made to do so, a new conception of education is accepted. It is conceived of no longer as grounded on a thorough training in a few subjects until the child has gained the power to turn his mind to one problem or another as they may be presented, but rests upon the assumption that a little knowledge of many things is the beginning of wisdom. Between a curriculum that is rigid and narrow and a curriculum that consists of a miscellaneous hodge-podge of subjects, there is a middle path along which education may develop, one that gives to the individual child a reasonable opportunity for cultural development, but that does not give him intellectual dyspepsia by placing before him so great a variety of subjects that he is bewildered by the richness of the feast. There is a great list of subjects, any one of which furnishes a wide opportunity for culture combined with thoroughness and intellectual discipline. The great responsibility of the teaching profession is to select from among these a suitable program, and not to seek to include in the studies and the activities of the school every subject of human interest.

The multiplicity of subjects in our school program has arisen, not so much out of the common judgment of the teaching profession, as out of the effort to meet the personal views of a great number of men, among whom there is no real agreement. Certain fundamental studies have been found to be more fruitful than are others in

[1] Preface to Professor Charles A. McMurry's recent book, *How to Organize the Curriculum.*

the development of the intellectual powers of the child or youth. A knowledge of the mother-tongue, elementary mathematics, drawing, a study of the government of one's own country, would probably be included in any course of study proposed by any teachers. But it is impossible to graft on this simple basis all the things which interest some twentieth century teachers or might interest many twentieth century children. This is not the function of the school. When it is attempted, the result is very like the physical upset that one gets from a dinner with too many highly spiced dishes. One may be very sure that the upset which comes to such a diner does not arise from the simple roast beef and potatoes that he may have eaten, but from the interesting additions. In much the same way the widespread intellectual flabbiness with which the minds of school children are affected is not due to the study of English, or mathematics, or drawing. It arises from the number and variety of dishes that have been added to the school table.

One of the most difficult tendencies for men to overcome, whether in education, in religion, or in politics, is a faith in specifics. We have no educational specifics. The culture of the human mind and soul may be advanced by the study of a reasonable group of subjects under almost any form of selection. There are some few that are not only of great cultural value, but are absolutely essential in civilized life. To these fundamental subjects others may properly be added. The notion, however, that the child or the youth will be miraculously bettered by any given one of these possible additions to the curriculum is one of the illusions with which we deceive ourselves. One has only to recall the glowing words of Mr. Herbert Spencer as to what would happen to the world when psychology was studied in every school. The weak point in his prognostications lay in the fact which he left out of consideration,—the psychology of the psychologists themselves!

The School as an Agency of Civilization

Next to government, the school is perhaps the oldest agency of civilization that survives to-day in approximately its earliest form. The earliest schools of which we have any complete description were those of Greece, and they served in greater or less measure as the pattern of all later schools. In the time of Socrates there were in Athens professional teachers of three kinds—the grammarians, who taught reading, writing, and perhaps arithmetic and geometry; the teachers of music, from whom the boys learned playing and singing; and the teachers of gymnastics, who taught wrestling, boxing, the throwing of the javelin, and other athletic exercises. To these teachers, boys were conducted daily by the pedagogues (boy-leaders), who were slaves. The boys were taught singly and not in groups, and all boys did not go through all schools. Socrates, for example, when he was grown, attended a school to learn music because he thought his education demanded it. The whole quality and value of the school centred in the teacher. The teacher made the school. The contact with him was that which gave value to attendance upon the school.

Throughout the civilized world of the Mediterranean there grew up schools which consisted of groups of pupils gathered about a master. The topics that the master taught varied with the religious and cultural notions of the inhabitants of the various Mediterranean countries. Even in remote regions the schoolmaster became a factor in the community life. In Palestine, for example, in the time of Christ, the schools maintained by the rabbis were mainly devoted to the study of the Hebrew scriptures, but they also touched, in greater or less degree, the philosophy of Greece. The school was held sometimes in the house of the rabbi, sometimes in a corner of the Synagogue or in a nook of the wall of the Temple. Such a school undoubtedly Christ Himself attended. And there He acquired that familiarity with the sacred writings of the Jews which He exhibited throughout the years of His teaching. He spoke, of course, Aramaic, but He learned, no doubt, to read Hebrew, and probably had some knowledge of Greek.

With the developing complexity of civilization, the school tended more and more toward a fixed curriculum and toward the task of teaching boys in groups rather than singly. The Roman schools, for example, were very like the modern schools. They were organized; the curriculum included, besides grammar, rhetoric, and elementary mathematics, certain foreign languages, and an extensive reading of the poets and of literature. Studies were compulsory, and all the methods of discipline used in modern schools were applied in the effort to induce boys to learn that which they had no particular interest in putting into their heads. In the Roman days, as now, there were well-founded complaints that the teachers were ill paid.

During the Middle Ages the schools remained very much what they were in the later days of Rome. A school gathered about a teacher or a group of teachers. The great masses of students who gathered in the medieval universities came to hear one or another great teacher. The inspiration and the genius of the teacher made the foundation upon which the value of the school was predicated, and altho the habit grew of lecturing to students in mass, nevertheless it still remained true that that which brought students together and that which made a school famous was the quality of the teacher.

Through all this period the social ideals of most civilized countries looked upon the school as a method of preparation for the exceptional boy—the boy of noble birth, or of a cultivated and wealthy family, or of unusual mental attainments. The school was democratic in the sense that it accepted rich and poor, noble and peasant, sometimes even the slave, provided he were a lad of great promise. There was no expectation on the part of society that the school would ever become the universal agency for the training of human beings. It was the door of opportunity for the exceptionally placed or the exceptionally endowed boy, those who would become scholars and teachers, priests and rulers and leaders. Inconsistent with our modern conception of democracy as this was, it operated to bring into the school the highest type of youth that a country produces. But always the notion that lay back of the school

and which was its reason for existence was the appreciation of the teaching, of the culture, and of the influence of the teacher.

An immense expansion of the function of the school came with the spread of the democracy of the seventeenth and eighteenth centuries and attained its full expression by the middle of the nineteenth. Civilized society had come to look upon the school as an agency for the training, not of the few, but of the whole body of children. Universal education was the watchword of the modern world and remains to-day the most powerful spring of action among civilized peoples. The conception that the school shall be open to all children, rich and poor, clever or dull, was a noble one. It arose out of the genuine aspirations of the European peoples for liberty and for justice. Its development has had the most profound effect upon the modern world.

The growth of this idea has entirely transformed the centuries-long conception of the school in two respects.

In the first place, the school is no longer thought of as a group of pupils gathered about a master who teaches each pupil according to his personal aptitude and powers. In every modern nation it has become a vast mechanism with fixed courses of study. The organization, rather than the individual teacher, is the source from which the training and improvement of the pupil is sought.

In the second place, the school organization now undertakes to deal, through a more or less formal curriculum, with all sorts and conditions of children and of youth. The question of attendance is no longer one of desire on the part of the pupil, of a capacity for education, or of the excellence of the teacher in a particular subject. Instead, there has been substituted a process possible only with a far-flung organization, under which all the children and all the youth of a nation are educated to a certain point, and as many of them as care to continue beyond this point are offered the facilities and advantages of what is called higher education. The school has been transformed from a personal, direct agency for the few, into a great machine for the many. Much the same process has gone on as that by which the individual home industries have been transferred to great factories. If all the children of a nation are to be educated,—as they certainly should be,—no other plan can be adopted than that of extensive organization. The system involves, however, certain inherent dangers which we should frankly recognize. To submerge the teacher — his culture, his spirit, and his inspiration — in the working of the machinery means that only mediocrity is served. Under such a situation, some other agency must in time arise for the purpose of cultivating the mind and the spirit of children of promise.

The Unseen Transformation of Human Institutions

In the history of civilization it has seldom happened that those who were directly concerned in the development of a great cause, whether of religion, of education, or of politics, realized how profoundly the fundamental purpose of their cause was modi-

fied by the means adopted for its development and by the organization set up to carry it out. The most altruistic and the most spiritual endeavors are transformed by the machinery which they use for their advancement.

Perhaps the most remarkable example of such a transformation is that of the Christian Church. For a century and a half it remained a purely evangelical movement, whose mission was to preach salvation through Jesus Christ. During the first decades of its wonderful history its leaders lived in constant expectation of the second coming of their Lord. The movement was filled with the idealism of an intense faith, and it spread over the civilized world with amazing rapidity. Its message was simple, direct, individual.

Then two things happened that profoundly modified the whole character and influence of what was called Christianity.

As decade followed decade and the coming of the Redeemer seemed no nearer, the Fathers of the Church found themselves more and more under the criticism of the Greek and Roman philosophers. They felt the need of combating this with a philosophy of faith, and through the labors of Origen and Clement and Saint Jerome, and more or less through the influence of Philo of Alexandria, in touch both with Hebrew theology and with Greek philosophy, there was developed a theology—a science of religion. In time this system of dogma came to bulk larger, in the eyes of those who directed the Christian movement, than the fundamental fact of their religion. Christianity became theological. Eventually, under Justinian, it was strong enough to close the rival School of Philosophers in Athens.

In the second place, the Church made a convert of a Roman emperor, and through this imperial support it grasped the reins of civil government. In a few years it passed from contumely to power. More than a thousand years were required to rescue civil authority from the grasp of the organization developed to deal with the theological and governmental functions that Christianity had assumed. In the long process the fundamental purpose for which the Church existed, and its relation to human society, had been enormously modified. The simple religion of its Founder had been overlaid by influences and forces developed to deal with theological and governmental functions.

The school—if one uses that term in the broad sense, to include our whole educational system—has passed through a somewhat similar transformation. It began as an agency for the development of the individual. The master and his pupil or the master and a group of pupils was the unit. As society became more complex, and as the notion of formal education for every human being was accepted, this unitary conception of education, based upon the intimate touch of master and pupil, could not meet the needs of society. Education must be given wholesale. Organization had to be resorted to, to deal with a problem so diverse and so enormous. The problem with which the school—again using that term in the wide sense—deals to-day is not unlike that of the Church. How can one develop the organization necessary for the

quantitative work that must be done and yet preserve the original fundamental purpose of the school, which is to discipline and train the mind and character of the individual boy or girl? How can we prevent this fundamental conception of education from becoming so distorted by the machinery of organization that its essential purpose is forgot? This, in the present phase of our American educational development, is the most important question to answer.

The history of our educational agencies during the past three decades is the perfectly natural result of efforts to develop in a democracy the means of education for the whole body of citizens. As the schools became free from the hard and fixed classical curriculum and added new courses of study intended to broaden the opportunities of the student and to give him also a wider knowledge of the forces and processes of modern civilization, it would have been surprising if the process of expansion had not gone too far. It could scarcely have been expected that we should altogether hold to the old sincerity of discipline, to the development of the individual, and to the primary conception of the school as an intellectual agency, when there were such numbers to be taught and an unlimited field of subjects in which instruction might be given. The process has been in operation for nearly a generation. The result is that organization and quantity have displaced, to a considerable extent, the individual contact of a student with a cultivated mind and the appreciation of that fundamental truth that in the development of a human soul it is not the amount of information absorbed that constitutes education, but the ability to think clearly and to bring out the right answer to the problems that present themselves in each human life. We are still disposed to add more organization to our machinery and to add fresh subjects to our already extended curriculum as an answer to the intellectual call of our day. This is in the same direction of mechanical expansion to which we have given ourselves during the last three decades. The pressing problem before us now is the betterment of our whole school life, and that betterment must come, not from greater quantity, but from a fresh appreciation of the culture of the individual mind.

It is a perfectly fair question for those who have favored this great development of school machinery and of a wide-flung curriculum to ask—What is proposed in order to bring about a betterment of our educational situation? If there are too many studies and too much machinery, what do you propose to substitute in their place?

It would seem to me that the acceptance of the following propositions would be fundamental to any movement looking toward a betterment of the quality of our education as compared with its quantity.

In the first place, we must assume, in a democracy, that every child must have an opportunity for a fair start in life, and that the means to that end lie in a wholesome elementary school. Along with this, however, we must also recognize the fact that a school cannot do everything, and that it will fufil its greatest function if it does well that which is its primary duty. The elementary course, therefore, offered

to all students ought to be simple and should recognize both the obligation of intellectual discipline and of human culture. Few of our schools have compassed these two ends as successfully as some European schools. In them the child has a few studies that he must learn with thoroughness if he is intellectually able to learn any subject thoroughly. There is not a great difference of opinion among men as to what these fundamentals are. The child attains his cultural opportunities, not so much through the disciplinary work of a formal class, as through the association and contact with an inspiring teacher. He will get what knowledge of music he has, or of botany, or of art, not through formal recitations, but through contact with a teacher who is himself cultivated in the subject he teaches, who brings him in touch with a certain amount of good music, or who takes him to the museum, or who leads him into the fields to study the flowers. One of the fundamental defects of elementary instruction is trying to teach all subjects by the same class-room process. I think no one can doubt that the boy who is held up to sharp, exact work in a few fundamental subjects and who is allowed to obtain his cultural knowledge by less formal means, not standing always in the fear of a mark from his teacher, will gain both in intellectual discipline and in cultural appreciation. How much can be done in cultural development of elementary students is a matter on which the judgment of men will necessarily differ, and in which there is an enormous difference of capacity among pupils. No process of formal education can bring all pupils either to a high state of intellectual discipline or to the broad enjoyment of cultural subjects. So far as human experience goes, the school does its best work when it demands a sharp performance in a few subjects, coupled with a cultural opportunity for appreciation in others.

In any case, the elementary school must limit its field. It cannot do everything. It cannot assume that the school is the only educative force in the community.

In this matter of the function of the elementary school, one who knows the situation feels a deep sympathy for the teacher. All discipline of Americans has greatly weakened in the last generation. The family discipline of a generation ago is almost unknown, and the tendency has been to throw upon the school an increasing responsibility for the moral, intellectual, and social cultivation of the boy or girl. The parents have come to think of the school as primarily responsible for the intelligence and character of their children. The school, in spite of itself, has had to accept in large measure this situation, and the teachers have struggled patiently and bravely in the effort to carry an impossible load. We cannot put on the school the entire responsibility for the moral, intellectual, and cultural training of the child. Much of it must be done elsewhere—in the family, in the church, in the social contact of human beings with one another. The German or the Italian child gets his love of music not from formal classes in school. He breathes it in as a part of the cultural atmosphere in which he lives. That we can do something to help this appreciation of cultural life by the teaching of certain subjects in the school is clear, but that we can turn matter-of-fact Americans into lovers of beauty by formal class recitations is a futile hope.

It would, therefore, seem to be fundamental that the elementary school should accept clearly its own limitations. It should make sure that the teaching which is common to all children is done with a sharp discipline of exact requirement, but that a very large part of what is meant to be of cultural value shall be through exercises not followed by examinations, but having as their spring of influence the contact with cultivated and inspiring personalities.

Under this regime the elementary school curriculum would be greatly simplified.

In the second place, while we must in a democracy proceed upon the assumption that every child is entitled to the fundamentals of an education in the elementary school, we must frankly recognize that a large proportion of the children of the nation have neither the desire nor the intellectual ability to complete the work of a secondary school with profit to themselves. In no nation in the world is there a task comparable to that of the American teacher in the secondary schools, patiently and devotedly toiling to bring through to graduation multitudes of pupils who have neither the desire nor the ability for intellectual work. The high school should no longer be the refuge for mediocrity that we have made it.

This involves no discrimination against any class or group in the body politic. The stupid or indifferent child is just as likely to be the son of the well-to-do as the son of the day laborer. Teachers are coerced by parents, by school directors, by all the influences that can be brought to bear, to keep in their classes numbers of students whose happiness and usefulness are to be found elsewhere.

This artificial lure of the high school would be removed in large measure if the high school ceased to play the rôle of a vocational school. A community, and particularly a community of moderate size, is easily made to believe that when its high school offers typewriting and commercial courses, and various other vocational subjects, it is a practical institution; and we Americans have a weakness for that which calls itself practical.

Many of these courses are illusory. The high school cannot turn itself into a vocational school without losing in large measure the place that it ought to occupy in the general cultural education of the people. A majority of the boys and girls of a community cannot go to college. The high school was originally founded to be the people's college. Its purpose was to give to those who took advantage of its courses that breadth and thoroughness of education which should enable them to grow into positions of usefulness and fruitfulness in a vocation or profession. The attempt to make of the secondary school at once a school of general cultural training and a vocational school has confused the two purposes. The high school should remain that which it was intended to be, and vocational instruction, such as is called for by those who desire to enter gainful occupations, should be of the sharp, precise, disciplinary sort that can be given only in a trade school. I talked with a high school graduate recently who had learned stenography in the high school, but later had found it necessary to take a course in typewriting in a commercial school carried on for that

purpose. In answer to the question as to what he was set to work to do first, he said, "I was set to work to learn how to spell, and," said he, "I learned it in three months." The high school would better serve its pupils by teaching them to spell, to read, to know good books, to reason in clear fashion, to know the fundamental principles of the government under which they live, rather than by trying to teach them typewriting and leaving them to learn how to spell later. Whatever one may think of the great expansion of the high school curriculum that has taken place in the last two decades, one must at least agree that it is now necessary that the high school should define what its function is and address itself steadily to the discharge of that function.

The softness and superficiality that have crept into the elementary school and the secondary school affect the colleges and the universities in an equal degree. The colleges, whether they exist as separate institutions or whether they are parts of a complex university, have also abandoned to a large extent the disciplinary function in education. They, too, seek to teach cultural subjects by the method of formal class recitation, and they have so allowed those activities of the college that lie outside of the curriculum to overshadow the intellectual activities of their institutions that scholarship and scholarly appreciation occupy a secondary place. They, like the high schools, admit to their classes great numbers of students ill-prepared for college work and having little or no interest in study, and keep them there by various processes of adventitious aid.

No group of men in the country are better cognizant of this state of affairs than college teachers themselves. In some colleges the faculties have made a gallant stand against the progress of intellectual softness and the desire for numbers. There are honorable exceptions to the general statement that the conditions of the college do not make for vigorous intellectual life. But taking the country over, it is fair to say that such effort as has been made by the faculties to maintain high ideals of scholarship and of scholarly life has been more than offset by the intense competition for numbers and by the widespread desire of alumni, and oftentimes of trustees, for preeminence in other activities of the student body, and in particular in athletics. That which a college calls its constituency—which means mainly the body of alumni—is more interested in a winning football team than in the presence of an earnest and scholarly spirit or of a generous cultural life among the student body.

The college, like the high school, has spread its offerings over too wide a field. Every college seeks to do everything. There is a lack of individuality among the colleges of the country with respect to what they teach. With them, as with the high school, the question must be fairly faced, whether they shall continue to offer great numbers of courses, some of which can be given only under unfavorable circumstances, or whether each college shall offer instruction in a field no broader than it can cover with sincerity and thoroughness.

In a general way, therefore, the fundamental concepts that must lie back of any movement of our educational system toward sounder conditions would seem to me to

depend upon a clear comprehension in the first place of what the elementary school, the secondary school, and the college can do, not what they would like to do. And this does not mean a narrow or a meagre offering of studies.

The leadership of the college will always be a powerful influence on the secondary school. To-day that influence makes rather for an emphasis on artificial standards of admission and on the exaltation of competitive athletics rather than for the appreciation of learning, of skill, or of intellectual sincerity. It has all come about naturally enough. It cannot go on indefinitely without profoundly affecting the intellectual and cultural quality of our national life.

The Relation of the Public School to the Trades and Crafts

There exists in our country a singular and a decidedly unwholesome situation with regard to the skilled crafts, which is directly related to the attempt to give vocational training in the public school. The old system of apprenticing, under which a boy became a journeyman through service under a master of the trade, has almost disappeared. Benjamin Franklin, when he died in 1790, left two sums of money, the one in Boston and the other in Philadelphia, to be loaned to apprentices. By the middle of the nineteenth century, it was impossible to find enough apprentices to take up the loans that the two funds had to offer.

For many years past, our supply of skilled labor has been in large measure drawn from England and the continent of Europe. Under the present immigration laws, however, this supply is so greatly diminished as to afford no longer any large number of skilled craftsmen. Our immigration laws do not allow, as do those of Canada, a selection of immigration on the basis of trade qualifications.

This situation has come about through a number of causes, among which must be set down the general neglect of employers, on the one side, to look out for the training of apprentices, and the unwise restrictions, on the other side, imposed by the labor unions. A boy may not enter most of the trades to-day until he is long past the time when his apprenticeship ought to begin, and even then his difficulties in getting into certain trades, by reason of the union restrictions, are far greater than most people realize. We have not yet approached the situation that obtained in France before the outbreak of the Revolution, when the trade guilds, corresponding to our trade unions, had become so autocratic as not only to control the amount of production but to limit so sharply the acceptance of an apprentice that the regime set up by the guilds had become an intolerable tyranny. When the General Assembly framed the first constitution, it was directed mainly at three privileged classes—the trade guilds, the nobility, and the clergy.

To-day in the United States both the employers of labor and the wiser labor leaders realize that restriction of apprenticeship has gone too far, even when considered from the standpoint of the unions themselves. The prohibition against the ac-

ceptance of an apprentice until the age of eighteen is most unjust to the youth of a country. The great mass of boys leave school at fourteen. There is no more pathetic situation in education than the aimless, haphazard experience which a large number of boys between the ages of fourteen and eighteen undergo in the United States. It is a hardship both on the boys and on the public. Looked at in its true light, it is no less fatal to the unions themselves, as all selfish measures turn out, in the end, to be. Never, in the history of the world, has the artificial attempt to limit production and to make out of the trades a privileged class succeeded. In the long run, it has brought down upon those who have attempted it the severest condemnation of society. There are many signs to-day that both employers of labor and the labor unions themselves will adopt a more humane and reasonable attitude toward the training of apprentices for the skilled trades.

The preparation of a youth for the skilled trades can be helped by a preliminary training in a well-conducted trade school. He will not become a journeyman in the trade school, any more than the student of engineering becomes an engineer in the engineering school, but he will learn the underlying theory of his trade, the science that directly relates to it, and if the school is rightly conducted, he will get the sharp sense of accuracy and responsibility which alone can make a good journeyman and the possession of which gives the skilled workman that joy in his craft which is one of the most enduring satisfactions that a human being can attain. The number of such schools is likely to increase, and we may well hope that the labor unions will have the wisdom and the sense of responsibility for their own youth which may prompt them to develop again that craftsmanship which meant so much to our country a generation ago.

In this situation, vocational training in the public schools has played a poor rôle.

These vocational efforts have been directed chiefly toward vocations other than the skilled crafts. The sort of vocational training that the boy gets in the public school turns him to typewriting, or to a minor place in a bank, or to a clerkship, or to salesmanship, or to some other calling which does not involve hard manual work and severe and exact skill. It is a singular part of the psychology of the situation that, while the graduate of the engineering school is perfectly ready to put on overalls and work in the grease and the dirt, the graduate of the high school expects to sit at a desk, or to run a typewriter, or to sell bonds, or to become a clerk in a bank. If he be the son of a journeyman in the trades, he is quite ready to accept a scale of pay in these places that scarcely yields him more in a month than his father receives in a week at present-day wages. The education of the public school has drawn pupils away from the productive work of the highly skilled and exact trades. Not only is the atmosphere of the school unfavorable to the development of such an ambition, but the kind of work that is given as vocational work is unrelated, both in spirit and in detail, to the sharp, careful training which fits a man for a craft or a trade. The result is that the high school vocational courses minister largely to vocations that may be useful enough in themselves, but which have little significance in the productive

work of the world. One regrettable fact about the whole process is that the propaganda for high school and college leads to desks and typewriters an army of youth who would be far happier in a productive craft if only they had found the path to it. How many farmers, machinists, carpenters, electricians, plumbers, or cooks have come out of all these courses?

A clear distinction is to be made between the vocational courses attempted in the regular school curriculum and the instruction given in continuation courses for the benefit of those already at work and earning a living, such, for example, as those offered to enlisted men in the army and navy. Continuation courses have great value for men in the skilled trades and in other vocations, and the more so because appeal is here made to the man or woman who has the energy and the ambition for self-improvement. Here, however, as in the high school, the temptation is always present to try to impart that technical skill and facility that can be acquired only in contact with practice. The continuation school does its best service for the man who seeks to better his knowledge and skill in his vocation by giving him the opportunity to ground himself in those fundamental studies that the school can give well, not by attempting to offer technical training which it can give but poorly. The ambitious man in the trades—the carpenter, the machinist, the plumber—does not need the continuation school to teach him the technique of his trade. What he asks of that school is English, mathematics, elementary chemistry and physics, a knowledge of which enables him to understand the theory of his trade and to advance in it. A training in the fundamental sciences underlying his vocation is what such a man needs, and this the school can do well and without increasing its plant and equipment. The technique of the trade it cannot teach.

The public school makes its greatest contribution to training in the crafts when it teaches boys and girls in the elementary school to do such work there as will give them the discipline of mind and the accuracy of knowledge necessary to enter a skilled craft. The greatest service the elementary school can do for the boy who wants to be a carpenter, or a mason, or a machinist, or an electrician, or a printer, or a glazier will not be accomplished by trying to teach him something about any of these skilled trades. It will do the greatest possible service for him if it sees to it that he knows the English language well, that he can reason in terms of his elementary mathematics with sharpness and accuracy, that he understands the fundamental principles upon which his government rests, and that he has acquired in the process of his elementary education that thoroughness of knowledge in these simple subjects and that ability to turn his mind to one problem or another which will qualify him to go into a trade school and to do its work so well that the trade school will not have to teach him English and elementary mathematics. With the best intentions on the part of those who originated these courses, the introduction of vocational training into the high school has in a considerable measure served only to lead men away from those high and honorable vocations which find expression in a sincere and accurate crafts-

manship and to entice them into occupations that are already overcrowded and that play a small rôle in the work of production.

The Sifting of the Present Day Curriculum

It is always easier to expand than to reduce. It will be difficult to carry out the process which Professor McMurry describes as "sifting out and organizing the treasures of the common school studies, accumulated in the last thirty years" of what he calls "reckless expansion." The main thing is that we turn our thought to-day in that direction, that we steadily have in view the necessary limitations as to what a school can do, and that we keep clear at each step the fact that the school serves its purpose best when it does certain things thoroughly and sincerely, not when it does many things superficially and insincerely. Such an attitude will sift out the long list of studies, but it will do something more important. It will bring a perspective as to the results of school training and a test of what the school does, not as drawn from hopeful and ambitious programs of study, but as demonstrated in the actual training of the minds of students.

"What will you drop from the present curriculum?" is the common enquiry. "Would you drop music or household economics?"

Perhaps these two topics, the one cultural and the other believed to have both cultural and practical value, may well serve as illustrations of the kind of process through which we must go.

The first step in the effort to answer this enquiry would be to ask — How much does the teaching of music mean to-day in the school, and how much does the teaching of household economics mean in the life and fitness and usefulness of those who are taught?

One would be slow to discourage any effort of a cultural value among the school population of the United States. We, as a nation, are so little cognizant of the influences of the arts and so little prepared for their enjoyment, that we should be chary about placing any obstacles in the way of an effort to develop cultural interests among our diverse American population.

Does the study of music, as it is taught in the schools, count fruitfully toward the development of such a cultural interest? Perhaps it does, but certainly in a minor sense. To have music taught as an ordinary school subject of recitation in class-rooms will not, in generations, greatly affect the cultural education of the people of the United States in music. This is a subject which can flourish only as it takes root in the cultural life of the people themselves. Such work as the school can do to foster that life will be done, not by the hard-and-fast process of class recitation, not by exercises upon which the student is to be marked and upon which his standing in the school is to be determined, but by bringing the pupil in contact, by one means or another, with those who understand and love music, by enabling pupils to hear sim-

ple music of a high order well performed, and by cultivating in their life the faculty of enjoyment of what is simple and beautiful. In a word, there is a whole series of cultural subjects with which the school may well deal in a helpful way, but which cannot be made a part of the fixed curriculum. That which comes to the pupil through such cultural studies comes in large measure through the deeper culture of the teacher and his ability to make evident to the pupil the appeal to his emotional nature. That formal class exercises do not accomplish this seems fairly evident. That in some cases these exercises defeat their own ends and actually give pupils a rooted distaste for these fields of activity, is indeed probable. Even in so universal a subject as the English language, the class routine in English does not create among children and youth any widespread interest in good books. It seems clear that in many cultural subjects the school must adopt a different method of presentation from that used in those fundamental disciplinary subjects without which the pupil cannot make his way into usefulness or understand the problems that lie all about him.

When one comes to the teaching of household economics, he touches a difficult field. So much has been said of the teaching of home economics, and it has indeed so sound a ground for a place in the school curriculum, that no thoughtful teacher can desire to discourage the study of those subjects which have been embraced under this general term. And yet nothing could be more wholesome than an examination of what the teaching in home economics is to-day accomplishing in our high schools and in our colleges.

Like nearly all other subjects that touch the industrial and economic vocations of life, the teaching of home economics has tended to become professional. Just as the schools founded for the teaching of the mechanical trades have almost invariably turned themselves into schools of engineering, so the schools of home economics tend more and more to become schools for professional training. To-day the school of home economics is devoted mainly to the training of specialists, generally teachers and dietitians. A group of teachers in a given institution train a certain number of young women, who in turn become teachers of other young women. There is great need for such teachers and great need for dietitians, but the teaching of home economics was intended to serve a much wider purpose in the public school than that of professional training. It was assumed that the subject would be taught in a simple fashion so as to place within the reach of all students, at least of the high school, a knowledge of simple hygiene and of the economics involved in the administration of the home, such as would disseminate among all groups of the community a better knowledge of wholesome cooking, of food values, and of the simpler and more necessary precautions for the preservation of health. To what extent does the teaching of home economics to-day serve this latter purpose? It is one thing to institute a course of what we call home economics, based upon the modern scientific knowledge, and to make that an interesting and productive course for professional students. It is quite another thing to make the essential facts involved in housekeeping, in wholesome cook-

ing, and in simple sanitation, available to the mass of students who enter the schools and colleges. How far the schools of home economics accomplish these two somewhat diverse ends it would be difficult to say, but nothing could be more appropriate than an enquiry as to the extent to which they are being met.

In other words, when the question is asked, as it frequently is,—"Would you drop music and home economics from the new curriculum?" I should say that a sound answer is, "I would look into the teaching both of music and of home economics and try to determine whether the present methods of teaching were accomplishing that which is sought, and whether the cultural end in the one case, and the practical end in the other, might not be attained by a process less burdensome on the student and the teacher, less expensive for the state, and more likely to reach the great body of the school population." No one will deny that it is easier to say this than to do it; it is always easier to add new things than to examine critically those already in operation. But we have come to a period in our cumbersome system of education when the pressing duty of those who have to do with education is the critical examination of what we are now doing and such gradual transformation of the studies and of the methods as patient and careful examination may indicate to be wise.

The Teacher's Responsibility to Civilization

The school — always using that term in the inclusive sense — is to-day the most influential agency in civilization. The primary purpose in its institution and its reason for existence to-day lie in the service that it can render to mankind in developing and training the powers of the mind during the period of childhood and youth. Primarily an intellectual agency, inevitably if it be sincere, its training carries with it the by-product of character-building. Its great influence has come out of the individual relation between teacher and pupil, and that relation still remains the most important means by which the intellect and the character of children and of youth are developed. The reaction of one student mind on another, the influences which social contact of pupils may yield in the development of character, are great factors in the total contribution of the school to society. But the essential reason for its existence still remains the fruitage of the individual relationship between the cultivated mind of the teacher and the growing mind of the child.

Beginning as an individualistic agency, the school has necessarily enormously expanded its machinery to meet the universal demand for education made in a democracy. Along with this multiplication of the machinery of education has come a great change in the character of the school itself. The individualistic relation between the teacher and the pupil tends constantly to be swallowed up in the process of dealing with the mass. This transformation involves momentous consequences for society. The changes that come in wide-reaching human institutions are themselves among the greatest forces that operate upon mankind. They are not spectacular, they do

not come in a moment, they are unseen because they are below the surface, but they produce deep, invisible, powerful currents that bear communities and nations they know not whither. When the Council of Nicea met, it dealt ostensibly with certain questions of Christian dogma and belief. The organization set up through its action profoundly changed the civil government of the world. Human organizations, and particularly those that have to do with the mind and with the spirit, have made their greatest mistakes in the past in the endeavor to compass too many objects, most of them good in themselves, but unrelated to the primary purpose for which the organizations existed. It is comparatively unimportant whether the school to-day offer a vast number of subjects or a smaller number, but it is vital that whatever development the school receives in order to meet the needs of new times and of new conditions, it shall stand primarily for that intellectual sincerity and that moral simplicity and thoroughness which constitute its reason for existence. Our problem to-day is to preserve this fundamental spirit while at the same time there is developed an organization sufficient to deal with the essential needs of the great democratic communities. The school will be able to fulfil that purpose only if it hold fast to the ideal with which it began.

Whether that ideal shall remain, whether it shall be the animating spirit of our school system, will in the end be decided by the teachers. A coherent and intelligent minority, having clear notions of what is needed, will in the long run impress its judgment so fully upon the whole people that it will be accepted. The question as to what the school is for and what it shall ultimately mean in American civilization will be decided by those who labor in the profession of the teacher. That decision should be reached thoughtfully, carefully, and in full view of the fact that the process of organization itself has in the past profoundly affected the most spiritual of human causes; that the school itself, as an agency for the upbuilding of the mind and of the character, may be transformed by those very processes of organization that offer themselves so readily to our human efforts for improvement. The teachers in whose hands rests the future of the twentieth century school should remember the evil that in the past has been wrought in other fields by over-organization.

PART V

PENSION SYSTEMS AND PENSION LEGISLATION

RECENT DEVELOPMENTS IN TEACHERS PENSIONS

THE fifteen years devoted to the study of pensions by the Carnegie Foundation and other organizations have not been sufficient either to exhaust the many problems involved or to change much of the sentiment and prejudices associated with the subject. In spite of a satisfactory record of progress which has resulted in the adoption of sound pension systems in all the states of the North Atlantic Division except New Hampshire and Rhode Island, and in Ohio and Wisconsin, bills of the type introduced in the Kansas and Washington legislatures, amendments looking to the repeal of the Indiana, Ohio, and Wisconsin systems, and addresses of the type delivered by the Secretary of the Illinois Teachers Pension and Retirement Fund indicate the survival of much darkness that still remains to be dissipated. On the other hand, to the record of the states of the North Atlantic Division there are to be added the action of President Harding in vetoing raids on the federal funds for pensions, the refusal of Governor Richardson of California to sign a pension bill passed by both houses of the legislature in spite of its obvious unsoundness and in the face of actuarial opinion, careful consideration of pension legislation in the State of Minnesota and two of her first class cities, St. Paul and Minneapolis, and the resolutions on pensions adopted by the National Education Association.

The attempt to secure the repeal of the pension systems in Ohio and Wisconsin, as well as a suit to prove the unconstitutionality of the system in the latter state, failed. The motives underlying the movements for repeal are either a feeling that the burden on the state is too heavy or the resentment of younger teachers against deductions from salary. The former is part of the general movement for retrenchment which in its sweep takes in both desirable and undesirable activities; the latter is largely the result of ignorance and lack of foresight. In Wisconsin, for example, three of the younger instructors in the University appeared in favor of the bill with the plea that they could invest the sum contributed toward a pension to better advantage. Pension systems, however, have developed largely because such opportunities for good investments have not been seized hitherto, with disastrous results in old age. Furthermore, the instructors did not and could not claim that the five per cent contributed by the state would be added to their salaries, an important consideration at any rate for the majority of teachers who enjoy the benefits of sound pension systems.

The Kansas and Washington bills are considered in other sections of this Report. The Journal of the Proceedings of the Sixty-eighth Annual Meeting of the Illinois State Teachers' Association contains an excellent statement of the principles underlying a sound pension system by Mr. W. M. Roberts, the principal of a Chicago high school, and an extraordinary defence of the Illinois plan by the secretary of the fund. This plan, which was adopted in 1915, requires a total contribution of $400 from the teachers, and is supported by the revenue of two-fifteenths of one mill upon

each dollar of assessed valuation of all the taxable property of the state, donations, gifts, etc. Teachers may retire on a maximum pension of $400 at the age of fifty, after twenty-five years of service. Disability allowances are granted after fifteen years of service and bear the same ratio to the full pension as the years of service bear to the total required. Refunds of one-half of the contributions without interest are granted in cases of separation before completing fifteen years of service. This system, according to its secretary, is simple, easily understood, and democratic, since all teachers contribute the same amount according to classification, enjoy the same benefits, and are in some cases, where the contributions are small, relieved of payment by the districts in which they serve. The system is easily administered and is solvent according to the state law, having promptly met its obligations and possessing assets of about $1,000,000. The refund practice is justifiable because the contributions paid by teachers in the early years of service are small and sometimes paid by the districts, while disability allowances are paid after fifteen years of service. The plan is desirable because the majority of contributors are women and are satisfied; in other words, since women have no dependents they are "anxious to receive whatever pension the state and their own contributions as provided by law may give after retirement." Finally, the plan is a pension and not an insurance law, which, as interpreted by the secretary, means that:

> "Our state law is based upon gratitude and not upon greed. Upon magnanimity rather than upon mathematics.
>
> "The law was enacted not for an investment but to give to teachers upon retirement the assurance of not living in want, rather than in luxury.
>
> "We hold, according to another statement, that in a Teachers' Pension Fund Law justice should precede mathematics any way."

The system is not insolvent because it has met all of its obligations ("insolvent means unable to meet one's obligations"), and has accumulated practically one million dollars assets. The plan is equitable since all pay the same contributions and receive the same contributions from the state. It is hard to understand why a state or municipality should contribute more to one individual than to another; the high salaried teacher should by economy and thrift accumulate enough not to need a pension as much as the low salaried teacher. It does not seem to occur to the secretary that the argument for a flat pension should also serve, if it were sound, as an agreement for flat salaries. Finally, in spite of the recent actuarial survey of Illinois pensions, which showed a deficiency of $20,140,628 in the teachers' fund, the secretary agrees with the Commissioner of Public Instruction in California that our pension experience in this country has been incomplete and inadequate, that the regular actuarial tables are not applicable to teachers, and that "we would rather err on the side of generosity, confident that the state will see us through if we get into deep water, than to err on the side of niggardliness."

The Standard or Reserve Plan, such as has been adopted in New York City, New

York State, New Jersey, Maine, Vermont, and Ohio, the secretary admits, possesses merit and offers a variety of benefits, but may be expensive for the older teachers and "is very complicated, intricate, and difficult to understand by the average contributor." It is much easier, no doubt, to convince a contributor how a just and magnanimous system can give a return of about $6500 for total contributions of $400, but the question still to be answered by those who continue to appeal to the much abused terms of justice, generosity, magnanimity, and democracy, and would draw distinctions between pension and insurance principles, is how long the generous State of —— (the state which has an unsound pension system is always generous) will be prepared to pay about $6100 to every retired teacher. The secretary of the Illinois Pension Retirement Fund, relying on the fundamental generosity of the General Assembly, omitted to discuss the reasons for permitting teachers to retire at the age of fifty, or to mention that the contribution of every teacher in active service was swallowed up in a fund out of which the pensions were paid, or to justify deductions from salaries without refunds of an adequate character and without protection for the first fifteen years of service. The teachers are entitled to know whether justice will protect them against the future that overtook the New Jersey, New York City, and countless other teachers pension systems until they were reorganized and placed on a sound foundation warranted both by actuarial and mathematical principles.

Fortunately, the National Education Association, through its Committee on Salaries, Tenure, and Pensions, is giving a better lead to the teachers of the country. The Committee presented the following resolution for endorsement by representative Assembly of the Association at its summer meeting in 1922:

> "We believe that no subject coming before the Association at this time is more vital to the progress and advancement of American education and the legitimate professional interest of the teachers than the establishment of satisfactory permanent teachers' retirement funds where such funds do not now exist. We urge the membership of the National Education Association in each state to take such steps as will secure the enactment of legislation providing such funds where they do not now exist. Every year of delay increases the burden of superannuation and the resultant inefficiency in our public schools, and causes privation to hundreds and anxiety to thousands of teachers.
>
> "We believe that satisfactory results can be secured with the greatest expedition and certainty if the Association continues the work which it has begun and authorizes and directs the appropriate committee to hear all persons interested in the problem and directs the committee to prepare and complete its report with conclusions and recommendations sufficiently in advance of the next annual meeting to permit it to be printed in the Journal."

The Chairman of the Committee himself presented the following recommendations as the fundamental principles of any sound pension system:

> "In the first place we want a retirement system in every State and Territory of America that will guarantee not 80 per cent, as we are doing this year, but

100 per cent of the annuity promised by the legislation enacted. That is what we want not only in New York, Vermont, and New Jersey, but in every State in the Union. We want every teacher guaranteed that.

"In the second place, we want a disability allowance, so that if a teacher becomes disabled either mentally or physically she may be given a retirement allowance regardless of the age attained.

"We want a pension system where the contributions after they have once been made are non-forfeitable. After the State has once contributed towards the teacher's retirement that fund belongs to her or her estate and should never be forfeited, regardless of whether the teacher remains in that State or goes to another State or retires entirely.

"We want an adequate pension system, a system that will guarantee to the retiring teacher a retirement allowance that will be comparable with her salary. We want an equitable retirement system, and by that I mean that the classroom teacher who has been teaching at a low salary in comparison with the highest paid teacher should get a pension comparable with her salary at the time of retirement."

PENSION AMENDMENTS

That pension systems will require amendments from time to time as experience develops is obvious, and most sound plans include provision for such amendments as will not interfere with their contractual character. It is equally obvious that no amendments should be considered without a thorough investigation of their financial effect. Since most sound plans are introduced with a clear conception of the cost involved, it follows that their stability must be affected by amendments that fail to take such considerations into account.

An examination of a large number of amendments proposed for the New York City and New York State pension systems indicates that this principle has not been taken into account. The New York City teachers are anxious to base pensions on the average salary for the last five instead of the last ten years of service. While there is nothing objectionable in principle to this proposal, the cost of the system must inevitably be increased by such a change; the amendment contained no reference to this important aspect of the problem. Another amendment proposing the optional retirement of teachers after thirty instead of thirty-five years is both wrong in principle, since retirement on the basis of service without an age qualification is inequitable, and defective in ignoring the increased cost. Similarly, a proposal to permit certain groups of teachers to contribute only three per cent of their salaries without at the same time adjusting the rates of allowances must affect the financial basis of the fund. The same objection holds against proposals to include teachers who have withdrawn from and later returned to service, to increase the minimum pension by one hundred per cent, to retire teachers on the basis of any ten years of salary that they may select, and to merge local pension systems in the state system and require the state to assume their assets and liabilities.

The pressure of political influence compels legislatures to go through the form of passing many bills of the type discussed and throwing the burden of further consideration on the governor or mayors. A loose system of this kind means that every interested and aggrieved group will press its demands. The establishment in 1918 in New York State of a Commission on Pensions "to inquire into the subject of retirement pensions, allowances and annuities for state and municipal officers and employees, especially with reference to the method of establishing and maintaining the fund from which such pensions, allowances and annuities shall be paid," suggests a practical method for saving the time of the legislature. Such a commission through its expert officers could pronounce on the validity of amendments to existing pension laws before they are presented. It is too much to hope that ill-considered amendments will disappear so long as teachers and others do not realize that sound pension systems aim to be equitable and just, to conserve the interests of all, and that there is no antagonism between justice and mathematics, as applied by the actuary to the pension problem. In an excellent summary on Pension Legislation,[1] Miss Ida E. Housman directs attention to the same problem and points out that the New Jersey Teachers' Pension and Annuity Law has been jeopardized several times by the introduction of unsound amendments. "The important thing to remember in any actuarial pension system is—the system may provide any type of benefit, *provided* those concerned are willing to pay the *cost*."

California

The recent increases in teachers salaries have drawn attention to the inadequacy of pension provisions which were established originally without any relation to salary scales. The existing pension system for the teachers of California provides a fixed pension of $500 a year irrespective of salary obtained after thirty years of service. The unsoundness of the system was discussed in the *Sixteenth Annual Report*. The pension is based on contributions from teachers of $12 a year supplemented by five per cent of the income from the state inheritance tax. The State Teachers Association has for some time realized that the system is insolvent; the inadequacy of the pension has emphasized the need of its revision.

Unfortunately, the two aspects of insolvency and inadequacy have not been considered together, with the result that the bill was introduced into the legislature to correct the latter but virtually ignoring the former. The amendment proposed an increase of the teachers contributions from $12 to $24 a year and an increase on the part of the state from five per cent of the income from the state inheritance tax to a sum equal to that paid by the teachers. The amount of the pension was to be increased to $720 a year. Whether the new rate of contributions would yield the amount required for pensions was not considered. Governor Richardson refused to sign the bill on the ground that the scheme is unsound in principle and that the great ma-

[1] *School and Society*, July 7, 1923, pp. 9–12.

jority of teachers would never receive a dollar in return. In other words, the younger teachers are paying for the pensions of those already retired or about to retire within the next few years.

An actuarial enquiry, allowing for the inadequacy of the data, shows that the total assets, including the actual and probable future income of the fund, amount to $7,147,162.45. The total liabilities of the system, including the present value of pensions to present teaching force, are $32,760,870.12. The valuation shows a deficiency of $25,613,707.67. It is to be noticed that the system does not provide for the refund of contributions to teachers who become separated from the fund before becoming eligible for retirement. There is no relation between the contributions and the pensions promised, nor can the receipts from the inheritance tax be anticipated. The proposed amendment would not have eliminated either of these defects. The actuary accordingly points out that

> "Two courses may be followed in this matter of reorganization of the pension system, one to continue as at present until the current pension payments exceed the current income, beyond which time the issue cannot be dodged; and the other to immediately prepare a reorganization for submission to the next legislature in order to forestall the inevitable insolvency. The first course is improper because it is unfair to both the teachers and the state. The longer reorganization is postponed the greater become the liabilities to existing pensioners and consequently the more difficult the problem of financing the reorganization. The continuation of inadequate contributions means either extremely heavy burdens upon present teachers after reorganization or the shifting of what they should have been paying in the past upon the state. If pensions are to be granted and paid, the necessary funds must be raised and postponement of solution of the problem only adds to the difficulty."

Acting upon this report, Governor Richardson proposed to have the matter looked into very carefully during the next two years in the hope that some plan may be devised to present to the 1925 legislature which will rescue the fund from insolvency. The State Commissioner of Education, however, denies that the system is insolvent, resting his argument on the fact that the reserves amount to over $1,500,000, and are increasing at the rate of $200,000 a year. He fails to recognize the difference between immediate solvency and actuarial bankruptcy, a failure that only means a shifting of the burden to future generations. He repeats the arguments employed by him in 1920:

> "While the actuary who investigated the fund is of the opinion that ultimately the fund will be exhausted by claims presented by retired teachers, there is no likelihood of this happening during the next fifteen or twenty years. As a matter of fact, teachers retirement salary funds are so new that actuarial advice concerning them can only be a guess. After we have had longer experience with our fund we shall be able to determine more exactly what should be done to properly finance it."

Whether the teachers of the state will be ready to adopt this pioneering spirit in the realm of mathematics is very doubtful; it is equally clear that politics, which

appear to be playing a part in the situation, have no more to do with actuarial principles than with the law of gravitation. As the actuary pointed out in his report, other states have already passed through the experiences that the commissioner desires for his state and have reorganized their systems.

Kansas

A state teachers pension bill, introduced before the Kansas legislature, managed to crowd within its brief compass most of the mistakes that have been made in the history of pensions. It is true that the system proposed was to be compulsory and on a contributory basis, but beyond that it was thoroughly and hopelessly unsound. Teachers were to contribute $12 a year during their first ten years of service, $18 a year during the next five, $24 a year during the five following years, and $30 a year for the next ten, or a total of $630. The state was to contribute an amount equal to the aggregate sum contributed each year by the teacher. Retirement was permitted by the bill after thirty years of service without an age qualification on an annuity equal to half of the annual salary received at the time of retirement, with a minimum of $400 and a maximum of $600. Disability allowances were to be paid in cases of disability occurring after fifteen years of service, consisting of an annuity of as many thirtieths of the full annuity for thirty years as a teacher had taught years. Teachers withdrawing from service during the first fifteen years were to be given a refund of their contributions to which interest was to be added after the fifteenth year of service. Appropriations of $50,000 a year for each of the first two years following the inauguration of the fund were to be made by the state.

The absurdity of the system is indicated by the following figures. The present value of a pension of $500 a year beginning at the age of fifty is estimated to be $7300. Under the proposed bill teachers would have contributed a total of $630 during thirty years; the bill in fact only required teachers to have contributed one-half of the expected annuity. At the best there would remain a deficiency of $6670 to be paid presumably out of the state appropriations. After this example of pension financing it is unnecessary to refer to the danger of basing pensions on final salary, to the injustice to teachers in withholding interest on their contributions in cases of withdrawal, and to the cost of a system that retires teachers after thirty years of service without an age qualification. Under the circumstances, it must have been a cynic who was responsible for the inclusion of a section in the bill requiring a thorough examination of the system by a competent actuary or actuaries once every three years, "or oftener if deemed necessary."

Maine

By the adoption of a new pension plan for the public school teachers of Maine, sound pension systems have now been established in all the states of the North Atlantic

Division except New Hampshire and Rhode Island. The Maine system, which is to become effective on June 1, 1924, is to be administered by a retiring board consisting of seven members — the state superintendent of public instruction, the state treasurer, attorney-general, commissioner of banking, and commissioner of insurance, and two teachers. Since the system is on a contributory basis, it would seem that the teachers are entitled to more representation than is here provided. The teachers will contribute five per cent of their salaries with a minimum of $20 and a maximum of $100 a year, but contributions are to be made only for thirty years. The state will contribute a sum equal to the aggregate contributions of the teachers up to a maximum of $35,000 a year. All contributions are to be held to the individual accounts of the teachers, who may retire from service on reaching the age of sixty and after thirty years of service, twenty of which must be in the State of Maine. The retiring allowance may be taken either in the form of an annuity purchasable by the accumulated contributions, or in some form of optional settlement. Disability allowances will be paid to teachers who become incapacitated for further work after six years of service, and will consist of such annuity as may be purchased by the teachers' contributions, plus such amount as may be granted by the retirement board after taking into account the earning capacity of the teacher; the total allowance is limited to one-half of the teacher's average salary and will be continued so long as justified by annual medical examinations. In the event of separation from service either on account of death, resignation, or dismissal before the completion of six years of service, the teachers' contributions will be returned with interest; to this the state's contributions will be added if the separation takes place after six years of service. An actuarial valuation every three years is required. The system has the merit of being simple and, altho an actuarial estimate of the future liabilities has not been made, the cost to the state at any rate is limited by the introduction of a maximum annual contribution on its part, which for the present appears sufficiently adequate. The absence of a provision to meet the accrued liabilities is noticeable, but is explained by the fact that the new system is not a substitute for but a supplement to the old non-contributory plan. This was amended in the same legislature by raising the amount of the pension from $250 to $300 a year. Teachers now in service may exercise a choice between the two systems; new teachers must join the contributory plan. While not a satisfactory solution of the problem of accrued liabilities, the retention of the old plan will leave the development of the new system clear and free to some extent from entanglements.

Minnesota

Seven years of experience with a pension system enacted in 1915 have convinced the teachers of Minnesota of its unsoundness. The system undertook on the basis of total contributions of $425 from the teachers, and half of this sum from the state, to retire teachers at the age of fifty on pensions of $500 a year. On July 31, 1922, it

was found that the assets of the fund amounted to $717,800 and the liabilities to $9,650,000—a deficit of $8,932,200. The liabilities were computed roughly on a group basis, assuming average ages. The fund is accordingly becoming impaired at the rate of one and one-third million dollars a year, without allowing for any increase in the number of teachers in the service.

The Board of the State Teachers Insurance and Retirement Fund accordingly proposed an amendment of the system. The same benefit on retirement, $500, and the same retiring age, fifty, were retained as in the existing system, but the period of service was extended from twenty-five to thirty years. Teachers who continued in service for thirty-five years might retire on a pension of $744. Teachers may elect an optional form of settlement under which they will receive the interest from their accumulations during their lifetime, the principal to be paid at death to a designated beneficiary. In cases of disability occurring after fifteen years of service and continuous for not less than six months, an allowance of $250 a year, increased by $25 a year for each year above fifteen and up to a maximum of $500, is to be paid. In order to encourage disabled teachers to return to service on recovery, the state will restore to the teacher's account the sums disbursed during the period of disability. Refunds of the teachers' contributions are to be paid with four per cent interest in the event of death, resignation, or dismissal, with additions from the state of 25 per cent of the accumulations after ten years of service increased by five per cent for each year up to twenty-five, when the contributions from the state will equal those of the teacher. The accrued liabilities are to be met in a novel way: since the contributions under the existing system are inadequate to pay the promised pension, teachers will be required to give four per cent notes for the amount of the deficiency, to be paid off in a fifteen to twenty year period. The state will assist teachers above the age of thirty-five in the payment of these notes at such rates that a teacher above the age of forty-five will receive three dollars from the state for every dollar contributed by him. All teachers will be required to contribute $64.79 a year which, with the state's contributions, to begin after the completion by a teacher of ten years of service, and interest at four per cent will accumulate $7268, the amount required to purchase an annuity of $500 at the age of fifty.

The amendment, which was not enacted, has the merit of emphasizing the principle that pensions must be adequately financed, and that the best method is an equal sharing of the burden by the teachers and the state. The progressive increase of the disability allowance is suggestive, but retains the old notion that a pension is a reward for service, rather than an instrument for promoting efficiency; incapacity after fifteen years of service leaves a teacher no less helpless than after a longer period. Provision for meeting the accrued liabilities has been carefully considered, but raises a question of policy, whether it is equitable to place any part of the burden on the teacher. An unanticipated tax, even tho actually in the form of savings, imposed on low salaries may work untold hardship. For the rest the amendment is questionable in value. The flat rate of pension of $500 is at the present time less than half of the average salary

paid to teachers in Minnesota; and it is too small a sum on which to retire the better paid teachers. Undoubtedly it offers some protection, but it is not related to the progress of salaries and standards of living. The rates of contributions are the same for men as for women, with the probable result that the former are paying too much for their benefits. Finally, there is no justification either in fact or in theory, for permitting retirement at as early an age as fifty; those who are too incapacitated to work beyond this age are eligible to disability benefits. An increase in the age of retirement and an adequate adjustment between salaries and pensions would have the advantage of distributing the burden to the teacher and ultimately of reducing the cost to the state.

Minneapolis and St. Paul

The pension systems of Minneapolis and St. Paul, which were established in 1909, are both passing through the same critical stage as the state system. A valuation of the Minneapolis system shows that the present value of the liabilities is $5,596,182 and the assets $2,817,799, leaving a deficit of $2,778,383. The system is supported by contributions from the teachers, and a city tax levy of two-tenths mills; an increase to three-tenths mills would still leave a large deficit. The actuaries accordingly made the following recommendations as a basis for revision:

Membership in the retirement plan should become compulsory upon the attainment of an age which makes it reasonably probable that teaching has been adopted as a profession. The teachers and the city should make annual contributions toward retirement benefits, and such deposits should not be subject to forfeiture on separation from service before retirement. The benefits at retirement should bear such relation to age, length of service, and compensation as to encourage long service and make possible the retirement without hardship of teachers no longer able to give satisfactory service on account of age or disability. The cost of accrued liabilities for past services should be borne by the city, which should meet the just expectations of present and retired teachers. The reserve basis should be adopted both for the payment of future benefits and for the establishment of a fund to pay pensions already granted, benefits on account of past services, and additional benefits to adjust present rights and expectations.

Following these recommendations, a new system has been adopted, and will become effective on January 1, 1924. It provides for compulsory membership of all teachers from the age of twenty-five, and for annual contributions of five per cent of salary; the city's contributions will begin with one and one-half per cent of a teacher's salary, and be increased by one-fourth of one per cent for each year of service until nine per cent is reached, but only up to a maximum salary of $3000. The new plan guarantees full annuities for present pensioners, and provides for the amortization of the present liabilities of about $3,000,000 by annual sums of about $140,000 spread over fifty years. Refunds of contributions with interest are granted in cases of separation from service before becoming eligible to retirement; the city's contributions will also be

paid in instalments only to teachers who withdraw from service after the age of fifty. Teachers may retire after reaching the age of fifty and completing thirty years of service on such annuities as may be purchased with their accumulations. An increase of the tax levy limit to one and five-tenths mills, recently approved by the legislature, has made the increased participation of the city possible.

The new plan is in many ways similar to that recently adopted in Wisconsin and has many of the same elements of flexibility. The distinguishing feature is the graduated increase of the city's contributions, which, taking advantage of the short tenure of the majority of teachers, reduces the cost of the system in the early stages.

The city of St. Paul has not yet reached the same stage as Minneapolis, but is suffering from the malaise that usually precedes valuations, discussions, and reform. Under the present system teachers contribute one per cent of their salaries up to $25 a year and the city may contribute up to one and five-tenths of the tax levy; retirement on a pension of $600 is possible after twenty-five years of service, and disability allowances may be granted after five years of service. A report on all the pension systems maintained in the city for teachers, police and firemen, and the employees of the health service shows that

> "The statutes covering the various pension funds now in operation appear to be built upon no scientific basis. Increases in pensions are granted; appropriation limitations are increased,— all without a study to determine the effect. The attitude seems to be to permit the institution of pension systems and specify the benefits. If sufficient money is not secured into a pension fund, the employes attempt to secure an increase in the amount that the city can appropriate. Upon the city then falls the expense."

The report recommends the passage of an enabling act to give the common council power to supervise the establishment of pension associations, the appointment of a board of administration, and the employment of an actuary. An immediate outcome of the general investigation is the appointment by the trustees of the teachers retirement fund association of an actuary to make a valuation of the fund.

A study of the pension situation in Minnesota inevitably discloses a great deal of waste motion and inefficiency due to lack of coöperation. At about the same time the inadequacy of all the pension systems—the state and the city systems—(the Duluth situation was discussed in the last Report) is discovered. Each system institutes investigations, which may, but for the fact that the Twin Cities employed the same actuary, lead to four different systems in the state and militate against migration. A sounder policy would have pointed to a revision of the pension systems on a state basis.

Philippine Islands

The Fifth Philippine Legislature has enacted a pension system for the teachers in the Islands which, while on a contributory basis, is actuarially unsound. The system

is to be administered by a Pension and Investment Board consisting of the Secretary of Public Instruction, the Director of Education, the Insular Treasurer, the Insular Auditor, and three members, of whom two must be teachers, appointed by the Governor-General. Teachers are required to contribute three per cent of their monthly salaries, which will be duplicated, but not assigned to individual accounts, by the Government. The funds are to be supplemented by moneys "resulting from fines, leaves of absence without pay, unfilled positions, and other salary savings for positions the holders of which are or will be entitled to the provisions of this Act, and with donations, gifts, legacies, or bequests of individuals, corporations, or organizations." Teachers may retire at any time after twenty years of service without an age qualification on pensions rising by one-tenth every three years from four-tenths of average salary during the last three years of service up to eight-tenths of this average after thirty-two or more years of service. A maximum pension of 4000 pesos is established. Disability allowances will be granted after fifteen years of service on the ground of unfitness certified by the Director of Education and a government health officer; the allowance is to consist of an annuity of two-tenths of computed average salary. Medical reëxaminations are to be made twice each year, and by a curious provision such allowances are limited to ten years. In the event of death during service a benefit of fifty per cent of the amount to which a teacher would have been entitled at the pensionable age is to be paid to surviving acknowledged children until the age of eighteen, or to the surviving lawful husband or wife until remarriage. Contributions will be refunded with four per cent compound interest to teachers leaving the service before becoming entitled to a pension. All conditions appear to have been provided for in this Act except financial soundness and security. No provision is made for meeting the accrued liabilities, or to relate the contributions to the prospective benefits, or to prevent retirement after twenty years of service as early as the age of forty.

Washington

The pension system proposed for the teachers in the State of Washington was not unlike the Kansas proposal in its defects, the only variant being the introduction of a flat pension of $480 a year instead of a pension equal to half of the final annual salary. The total contributions of the teachers were to be $720, and retirement was to be permitted after thirty years without an age qualification. The contributions from the state were less clearly defined; if in any year the contributions from the teacher were inadequate to pay the pensions, the deficiency was to be made up from the inheritance taxes, and, if this sum did not suffice, then from the general fund, but only up to the sum contributed by the teachers in the preceding year; if a deficiency was still to exist, then all allowances were to be prorated. Refunds were to be made only in cases of death or dismissal, but without interest. Legislation of this kind can only be paralleled in the earliest years of the pension movement. To-day it

seems inconceivable that any public authority or any body of teachers would be willing to enter into pension systems of a type that has so frequently met with disaster.

FEDERAL PENSIONS

The United States Civil Service Commission has collected evidence on the operation of the Civil Service Retirement Act, which was passed in 1920. Altho the period that has elapsed since the passing of the Act is too short to yield any definite conclusions and has coincided with considerable retrenchments in the service consequent on the winding-up of numerous war activities, some results are already recognized. As might have been expected, during this period the effect of the retirement system on turn-over could not well be gauged; on the other hand, there is adequate evidence from many departments and bureaus of a new hopefulness among the younger employees and of a decline in the lethargy often noticeable among those of middle age. The existence of an annuity system has rendered it possible to retire those whose efficiency had declined on account of age and at the same time has in many cases improved the general efficiency of the service by opening up the avenues of promotion. The chief criticism of the plan centres round the adequacy of the annuity, which is limited to a maximum of $720, a sum which may be adequate in most cases, but is often inequitable for the high-salaried officers. Many critics of the systems advocate a reduction of the age of retirement from seventy to sixty-eight or even sixty-five, with opportunities for continuance in the service as circumstances may warrant. The survey is important if only because it emphasizes the central fact that the existence of a retirement system is warranted mainly in promoting efficiency of service. This fact established, amendments along sound principles, on which the Act was not wholly based, may well follow.

The cost of the federal pension undertakings during the fiscal year 1921–22 amounted to $255,201,662, of which $1,394,079 was for maintenance. This total represented a decrease of $4,908,259 over the previous year, due to the number of deaths among veterans of the Civil War. The total number of pensioners was 547,016 and included forty-nine widows of soldiers of the War of 1812. The annual reduction in the cost of federal pensions is not as rapid as would be expected from the increasing death rate among veterans, since each year some politician, actuated by motives of generosity and compassion combined with political hopes, advocates an increase in the amount of the pension. During the past year, Senator Bursum introduced a bill providing pensions of $50 a month for all widows of Civil War veterans, increasing the pensions of veterans from $50 to $72 a month, and raising the amounts payable to Mexican War veterans and the widows of veterans of the War of 1812. This bill was passed by the Senate and would have meant a total increase of $108,000,000 in the annual pension bill. Fortunately, President Harding vetoed

the bill and returned it with the following message, which placed him by the side of President Cleveland as refusing to adopt an easy but costly road to popularity:

> "If the act were limited to its provisions in behalf of the surviving participants in the Mexican and Civil Wars, and widows of the War of 1812, it would still be without ample justification. The Commissioner of Pensions estimates its additional cost to the Treasury to be $108,000,000 annually, and I venture the prediction that with such a precedent established, the ultimate pension outlay in the half century before us will exceed fifty billions of dollars. The act makes no pretense of new considerations for the needy or dependent; no new generosity for veteran wards of the nation; it is an outright bestowal upon the Government's pension rolls, with a heedlessness for the Government's financial problems which is a discouragement to every effort to reduce expenditures and thereby relieve the Federal burdens of taxations.
>
> "The more particular objection to this act, however, lies in its loose provisions for pensioning widows. The existing law makes the widow of a Civil War veteran eligible to a pension if she married him prior to June 27, 1905. In other words, marriage within forty years of the Civil War gives a veteran's widow a good title to a pension. The act returned herewith extends the marriage period specifically to June 27, 1915, and provides that after that date any marriage or cohabitation for two years prior to a veteran's death shall make the widow the beneficiary of a pension at $50 per month for the remainder of her life.
>
> "In view of the fact that this same bill makes provision for pensions for widows of the veterans of the War of 1812, the possible burden of this sweeping provision seems worthy of serious consideration. Frankly, I do not recognize any public obligation to pension women who now, nearly sixty years after the Civil War, become the wives of veterans of that war.
>
> "The Government has so many defenders to whom generous treatment is due, that Congress will find it necessary to consider all phases of our obligations when making provisions for any one group.
>
> "The compensation paid to the World War veterans, those who shared the shock and sorrows of the conflict, amounts to $24 per month. It would be indefensible to insist on that limitation upon actual war widows, if we are to pay $600 per year to widows who marry veterans sixty years after the Civil War."

AMERICAN MUSEUM OF NATURAL HISTORY

THE pension plan for the employees of the American Museum of Natural History has completed ten years of its existence. In the Tenth Annual Report of the Pension Board the occasion is used for congratulation on the success of the fund. The system is financed by contributions of the employees who choose to become subscribing members and pay three per cent of their salaries, which sum is duplicated by the trustees. The conditions for retirement are extremely flexible. Male employees may retire at the age of sixty after twenty years of service or at the age of sixty-five after fifteen years of service; female employees with similar periods of service may retire five years earlier in each case. The allowance varies with the age and length of service and ranges

from a minimum of $180 a year after fifteen years of service to a maximum of half average annual salary for the last three years after thirty years of service. A curious provision limits the duration of the pension to the number of years of service completed before retirement, except that the pension is granted for life on the completion of thirty years of service. Gratuities are paid to dependents of employees who die during service or after retirement.

Since the system of retirement is complicated and the financial basis bears no relation to the pensions to be paid, the ultimate cost cannot be anticipated. In its report the Pension Board takes credit to itself from the fact that the "subscribers do not claim all the benefits to which they are entitled, it being well known that many who are eligible to be retired and draw pensions prefer to continue in their usual lines of employment. Therefore, instead of being a source of expense, they remain a source of income." A better explanation of this continuance in employment, however, is found in the figures given in the report of the amount and duration of the pensions granted to the employees already retired:

Yearly Allowance	*Period of Pension*
$416.00	16 years
253.03	15 years
988.00	Life
455.56	23 years
527.29	23 years
406.16	18 years

The amount of the pension with the cost of living as at present and the uncertainty whether the pension will continue until death may be important factors that weigh with employees eligible for retirement. The status of the fund, had all those eligible for retirement exercised their right, would probably not have been as favorable as it appears to be to the trustees. There is a fallacy in the assumption of the Board that the tendency of the employees to continue their work showed that any danger of a deficiency in the fund might be theoretical rather than practical. A pension fund has no more justification than an insurance company to count on theoretical rather than practical deficiencies. The important question is whether the fund is so organized that it can at any time meet all the contingencies to which it is liable. In view of the congratulatory tone of the report, the following statement appears interesting:

> "Therefore we do not feel inclined to recommend at this time any special form of safeguard or the setting aside of an emergency fund on the part of the trustees, feeling that they as well as their successors, will at all times, should the need arise, give full consideration to the obligations of the fund, and to the employees. While we hope that this may never occur, it may, at some later date, be necessary to alter the Rules somewhat so as to meet any liabilities which may arise."

INDUSTRIAL PENSIONS

The development of industrial pension systems has been checked to some extent by the retrenchments following the war, and to some degree by uncertainty as to the value of the more common type of pensions already introduced. A few systems following these lines have been established and possess all the features that have come to be regarded as unsound: they are non-contributory, discretionary, and non-contractual. The pension plan for the subsidiary companies of the Bethlehem Company, "established in recognition of the long and faithful service of many employees who have given the better part of their lives in its service, aiding toward its advance to progress and who have reached or will reach an age necessitating their retirement," provides a pension of one per cent of the average yearly wage during the last ten years of service for each year of service, with a minimum of $180 and a maximum of $1200 a year, to employees who have reached the age of sixty-five and have completed twenty-five years of service. A disability pension calculated in the same way but without a specified minimum is promised to employees who become wholly incapacitated after fifteen years of service. The companies retain the right to change, alter, or modify the pension plan, or to terminate it after giving at least thirty days notice.

The general lines of the pension plan adopted by the Commonwealth Edison Company of Chicago are somewhat similar in character. Here employees may retire at the age of fifty-five after thirty years of service, or at sixty after fifteen years of service, or at sixty-five after five years of service. The pension consists of an allowance for each year of service of one and one-half per cent of average annual pay during the particular consecutive five years of service when such average pay was highest. A minimum pension of $300 and a maximum of $6000 are established. If the cost of the plan in any age exceeds one per cent of the gross income of the Company, the pensions will be prorated. The plan is not contractual.

A non-contractual pension system, with rights of amendment, suspension, and annulment reserved to the Board of Directors of the Company, has been established by The Marine Trust Company of Buffalo. Employees may be retired after twenty years of service at the age of sixty-five, if men, and sixty, if women, with compulsory retirement ages at seventy and sixty-five respectively. The retiring and disability allowances consist of two per cent of average annual salary during the last three years of service for each year of service up to twenty-five, with a minimum of $720 and a maximum of $3000. The disability pension is payable after ten years of service after examination by a physician selected by the Pension Committee.

The history of industrial pensions is repeating the history of teachers pensions, and appears to have reached the stage attained by the latter about 1915. Whatever the practice in industry may be—and the practice is overwhelmingly of the type represented by the systems here described—all serious discussions of the problems are

wholly in favor of the principles now generally accepted as sound for the teaching profession. The recent reports of the Merchants Association of New York and of the National Personnel Association advocate the adoption of the contributory principle in industrial pensions, and the recognition that the chief purpose of a pension is to promote efficient service and that "a pension promise that is not certain involves an uncertain morality." An excellent summary of the present condition of industrial pensions and a thoroughly objective analysis of the theory involved is contained in *A Critical Analysis of Industrial Pension Systems*, by Luther Conant, Jr., the result of an investigation of the problem made for the Bemis Brothers Bag Company of Boston. The work discusses the purposes of pension systems, non-contributory pension systems of the "discretionary" and of the "limited-contractual" type, contributory pension systems, cumulative "single-premium" annuities as a substitute for pensions, the cost of pensions and annuities, and the benefits to be included. On the whole, the author appears to be in favor of the single premium annuity policies as the most effective type in industries, and a tabular analysis of the advantages and disadvantages of the various types proves the author's contentions adequately. The most vital question in the organization of a pension system, however, is whether the system recognizes definite rights on the part of the employee; whether the employee contributes directly or not is a subsidiary matter; yet

> "While, however, the question of direct contributions is of less importance than the question of contractual right, the contributory system is to be recommended wherever it is practicable. Not only will workers ordinarily take a keener interest in the plan, but they can feel that they are largely providing for their superannuation through their own effort."

The employer who reads this book, which deals exhaustively with all phases of the pension problem and presents every shade of opinion and practice in the field, is adequately warned about the cost and the importance of actuarial assistance. Useful information is presented in an analysis of existing plans and in the selected bibliography. The concluding paragraphs contain the best criticisms of existing systems and suggestions for an adequate solution:

> "If Industry is to undertake to deal with the superannuation problem at all, it may fairly be required to devise some more equitable and more effective method than that reflected in existing pension practice. In this respect the annuity system . . . has a particular appeal, and especially its introduction could be made general among industrial establishments. With such a system in practically universal operation, the great body of wage-earners would be making some provision for support in old age and (except for the "trial service" period) *pro rata* with every year of service rendered. Because of this fact the annuity system seems entitled to most serious consideration, not only by industrial executives, but by the public at large."

This is, of course, the position already accepted in the best pension systems recently established for teachers, and is essentially the plan which, following the consideration of the problem in the Ninth Bulletin of the Foundation, *A Comprehensive Plan of Insurance and Annuities for College Teachers*, is represented in the establishment of the Teachers Insurance and Annuity Association of America.

HENRY S. PRITCHETT.

October 15, 1923.

PART VI

DE MORTUIS

DE MORTUIS

EDWARD ARCHIBALD ALLEN

Edward Archibald Allen was born in Suffolk, Virginia, October 3, 1843. He left Randolph-Macon College in 1862 to join the Thirteenth Virginia Cavalry, with which he served during the remaining period of the Civil War. He then entered the University of Virginia, graduating in 1868. After several years of teaching in preparatory schools, he became professor of English and modern languages at Central College, Fayette, Missouri, and in 1885 was appointed professor of English at the University of Missouri. This post he held for twenty-five years, retiring in 1910.

Professor Allen was a member of the Modern Language Association of America and of the Grammatical Society of England, and was a frequent contributor to literary and philological journals.

The Carnegie Foundation granted Professor Allen a retiring allowance in September, 1910. He died at Columbia, Missouri, September 22, 1922.

FREDERICK ANDEREGG

Frederick Anderegg was born at Meiringen, Switzerland, June 11, 1852. He came to this country while a boy and began teaching when only sixteen, before entering college. He entered Oberlin College in 1881, when he was twenty-nine, and upon graduating became tutor in mathematics in the Oberlin Academy. In 1888 he was a graduate student at Harvard University, where he became instructor the following year. In the fall of 1890 he was recalled to Oberlin as associate professor in mathematics, and was made full professor two years later. His service to the college continued for thirty-three years, and his entire teaching experience extended over fifty years, his retirement taking place in 1920.

Professor Anderegg was a member of the American Mathematical Society, and the author of various mathematical articles and a text-book on Trigonometry.

The Carnegie Foundation granted Professor Anderegg a retiring allowance in September, 1920. He died October 11, 1922.

LUETTE BENTLEY

Luette Bentley was born June 2, 1841, at Streetsboro, Ohio. She attended a preparatory school at Painesville, Ohio, and entered the newly established Lake Erie Seminary there, graduating with the class of 1865. She at once became a member of its faculty in the department of physiology and hygiene, and held this post for forty-four years, spending her summer vacations and an occasional leave of absence in the study of medicine and surgery. In 1878 she was elected associate to Miss

Mary Evans, principal of the Seminary, and continued in this capacity until 1898, when the Seminary received its charter as Lake Erie College, with Miss Evans as its first president and Miss Bentley as dean. During their service of over forty years, they exerted a wide influence upon the development of higher education for women in the middle west. Both retired from active service in 1909.

The Carnegie Foundation granted Dean Bentley a retiring allowance in June,1909. She died at Painesville, Ohio, July 20, 1922.

RICHARD GAUSE BOONE

Richard Gause Boone was born at Spiceland, Indiana, September 9, 1849. He entered the field of education in 1876 as Superintendent of Schools at Frankfort, Indiana, where he remained for ten years. He was then appointed head of the Department of Education at Indiana University, and in 1893 became president of the Michigan State Normal School. From 1905 until 1909 he was Superintendent of Public Schools at Cincinnati, Ohio, and then became connected with the Department of Education at the University of California, where he remained until his retirement from active service in 1921.

Professor Boone was the author of a number of books dealing with education, among them *The Science of Education* and a *History of Education in the United States.*

The Carnegie Foundation granted Professor Boone a retiring allowance in July, 1921. He died at Berkeley, California, April 8, 1923.

LOUISE BOTH–HENDRIKSEN

Louise Both-Hendriksen was born in the West Indies in 1845. After receiving her education in America and abroad, she began teaching in 1867 at the Rockland Institute at Nyack, New York. Eight years later she became a teacher of English literature at Packer Collegiate Institute in Brooklyn. Following this, she was appointed professor of French at Smith College, where she remained for nine years. The three following years she was a lecturer on art and architecture at Pratt Institute, and in 1896, when Adelphi College was founded, she accepted the position of instructor, and later assistant professor of the history of art. This post she held for fourteen years, retiring in 1908.

The Carnegie Foundation granted Professor Both-Hendriksen a retiring allowance in June, 1908. She died March 4, 1923.

JAMES RAYMOND BRACKETT

James Raymond Brackett was born in Raymond, Maine, April 1, 1854. He entered Bates College in 1871, and received the degree of bachelor of arts in 1875 and that of master of arts in 1878. He then became a graduate student in literature and philology at Yale University, and received his doctorate in philosophy in 1880. After teaching in high schools in Vermont and Massachusetts for four years, he was appointed professor of comparative and English literature at the University of Colorado in 1884, and served there continuously for thirty-five years, during the last ten of which he was dean of the graduate school.

The Carnegie Foundation granted Dean Brackett a retiring allowance in June, 1919. He died July 9, 1922, at Boulder, Colorado.

HENRY KINGSBURY BURRISON

Henry Kingsbury Burrison was born April 15, 1849. He was graduated from the Massachusetts Institute of Technology in 1875, and two years later joined its staff as instructor in drawing. During his connection with the Institute, which lasted for thirty-seven years, with advancement in grade to assistant professor, he organized and developed the department of mechanical drawing, and was its head for a number of years.

The Carnegie Foundation granted Professor Burrison a retiring allowance in July, 1914. He died February 2, 1923.

JOHN WILLIAMSON CALDWELL

John Williamson Caldwell was born in Charleston, South Carolina, January 31, 1842. He graduated from the College of Charleston in 1861 and began the study of medicine, but during the Civil War he joined the Marion Artillery, and was several times detailed for hospital service at Charleston. In the fall of 1863 he obtained a furlough in order to study at the Medical College of Virginia. The following year he returned to the Confederate Army and served until the end of the war. He then spent nine years in the practice of medicine, and in August, 1874, he accepted the chair of natural sciences at the Southwestern Presbyterian University at Clarksville, Tennessee. He resigned this post in 1884, and after a year of study at the Johns Hopkins University was elected professor of chemistry and geology at Tulane University. He remained at Tulane for twenty-two years, resigning in 1907.

The Carnegie Foundation granted Professor Caldwell a retiring allowance in June, 1907. He died in New Orleans, January 2, 1923.

SAMUEL ROBERTSON CHEEK

Samuel Robertson Cheek was born at Danville, Kentucky, in 1855. He entered Centre College at Danville in 1871, and upon graduation taught Greek and Latin for several years in what was then known as the sub-freshman classes. The years 1879 to 1881 he spent in graduate study at Johns Hopkins University, and in 1881 was elected to the chair of Latin at Centre College.

During his forty years of service at Centre College Professor Cheek was responsible not only for the success and development of his own department, but introduced into the College its first regular four-year course in English, a permanent chair of English having been created in 1890.

The Carnegie Foundation granted Professor Cheek a retiring allowance in June, 1921. He died April 19, 1923.

JOHN COX

John Cox was born in London, England, November 20, 1851. He was graduated from Trinity College, Cambridge, in 1874 and was at once elected to a resident Foundation Fellowship, lecturing in mathematics at the same time at Newnham and Girton Colleges. In 1887 he was appointed Warden of Cavendish College, Cambridge, which position he held for ten years. He then became connected with the University Extension Movement for several years. In 1890 he went to Montreal to organize the department of physics at McGill University. As Macdonald Professor of Physics and Director of the Laboratory for nineteen years, he built up a department which added greatly to McGill's renown in the scientific world. He retired from active service in 1909.

The Carnegie Foundation granted Professor Cox a retiring allowance in September, 1909. He died at Hayes in Kent, England, May 14, 1923.

ELIZABETH HARRIET DENIO

Elizabeth Harriet Denio was born at Albion, New York, August 3, 1842. After graduating from Mount Holyoke Seminary in 1866, she spent several years in study abroad. Returning to this country, she taught at Wellesley College for twenty years, first as professor of German and then as professor of the history of art. In 1896 she went to Heidelberg, and after two years of study received the degree of doctor of philosophy from that university. In 1902 she became connected with the University of Rochester, first as lecturer on art and then as professor of the history of art. This post she held until her retirement in 1917.

Professor Denio served as art guide at the St. Louis Exposition and in a similar capacity at different expositions after that time. From 1913 until her death she ren-

dered valuable service as a member of the board of directors of the Memorial Art Gallery of the University of Rochester.

The Carnegie Foundation granted Professor Denio a retiring allowance in July, 1917. She died December 23, 1922.

CHARLES FRANKLIN EMERSON

Charles Franklin Emerson was born at Chelmsford, Massachusetts, September 28, 1843. Upon graduation from Dartmouth College in 1868, he was appointed instructor of mathematics in the New Hampshire College of Agriculture and Mechanic Arts, at that time a part of Dartmouth College. In 1872 he became associate professor of natural philosophy and mathematics at Dartmouth College, and in 1878 Appleton professor of natural sciences, a post which he held for twenty-one years. In 1893 he assumed also the duties of dean of the academic faculty. By the year 1899, owing to the expansion of the college, these duties had so increased that Dean Emerson was forced to give up teaching in order to devote his entire time to administrative work. He was dean of the college for twenty years, and on his retirement in 1913 at the age of seventy, he had served Dartmouth for forty-five years.

The Carnegie Foundation granted Dean Emerson a retiring allowance in July, 1913. He died at Hanover, New Hampshire, December 1, 1922.

HAROLD CLARENCE ERNST

Harold Clarence Ernst was born July 31, 1856, at Cincinnati, Ohio. He graduated from Harvard College with the degree of bachelor of arts in 1876, and the following year entered the Harvard Medical School, receiving his degree of M.D. in 1880. In 1886 he was appointed demonstrator in bacteriology at Harvard, and continued to teach in that department for thirty-seven years, having become its head in 1895. During this long service he played a conspicuous part in the development of the Harvard Medical School, arranging in 1906 the dedication of the new buildings, and editing a history of the school.

Professor Ernst was a noted bacteriologist. For twenty-one years he was secretary of the Association of American Pathologists and Bacteriologists, and its president in 1909. He was also, for many years, editor of the *Journal of Medical Research*, president of the Boston Society for Medical Sciences, and a member of many other medical and scientific organizations. He frequently appeared before the legislature of Massachusetts as an adviser in the development of laws regarding medical education. He wrote several books on bacteriology and published many articles in medical magazines.

The Carnegie Foundation granted Professor Ernst a retiring allowance September 1, 1922. He died at Plymouth, Massachusetts, September 7, 1922.

BERNHARD EDUARD FERNOW

Bernhard Eduard Fernow was born in Posen, Prussia, January 7, 1851. He studied at the Forest Academy, Hanover-Muenden, and after some years of practical experience in forestry came to the United States in 1876. While engaged for several years in the service of a metallurgical company, he took an active part in inaugurating the forestry movement in the State of New York which resulted in establishing the forest reserves of the Adirondacks. During the twelve years as chief forester of the United States Government, by articles, circulars, and lectures, he stimulated interest in forestry, directed most of the pioneer state legislation concerning forestry, and secured the first important national forestry legislation, thus leading to the establishment of our National Forest Reserves.

Dr. Fernow's academic career began in 1898, when he was called to Cornell University to organize the first forestry school in the United States. It was maintained by funds from the state, which also provided a school forest of thirty thousand acres in the Adirondacks. After leaving Cornell in 1903, he delivered a course of lectures on forestry at Yale University, inaugurated the school of forestry at the Pennsylvania State College, and finally, in 1907, established the faculty of forestry at the University of Toronto. After twelve years of service there, he retired in 1919.

The Carnegie Foundation granted Dr. Fernow a retiring allowance in July, 1919. He died at Toronto, February 7, 1923.

ALBERT STOWELL FLINT

Albert Stowell Flint was born September 12, 1853, at Salem, Massachusetts. After graduating from Harvard College in 1875, he pursued his studies at the Massachusetts Institute of Technology, Princeton University, and the University of Cincinnati. In 1881 he became connected with the United States Naval Observatory, and later was assistant in the Transit of Venus Commission. In 1889 he was appointed assistant astronomer at the Washburn Observatory of the University of Wisconsin, and in 1904 was promoted to the post of astronomer, which he held until his retirement in 1920.

Professor Flint was a member of several astronomical and scientific societies, and coöperated with other astronomers in the publications of the Washburn Observatory.

The Carnegie Foundation granted Professor Flint a retiring allowance in July, 1920. He died at Madison, Wisconsin, February 22, 1923.

GEORGE LINCOLN GOODALE

George Lincoln Goodale was born at Saco, Maine, August 3, 1839. He was graduated from Amherst College in 1860 and from the medical department of Bowdoin College three years later. He practised medicine at Portland, Maine, for several years, then turned his attention to study and research in botany. In 1867 he accepted the chair of natural science at Bowdoin College, and at the same time was professor of materia medica in the Medical School of Maine. Four years later he went to Harvard University as lecturer on vegetable physiology and instructor in botany, and the following year became assistant professor. In 1888 he was made Fisher Professor of Natural History, having previously been appointed Director of the Botanic Garden. During his thirty-seven years of service at Harvard, Professor Goodale was not only a valuable teacher and administrative officer, but as Curator of the Botanical Museum he added largely to its collections illustrating the economic aspects of botany, and carried on many experimental investigations in that field. On retiring from active service in 1909, in recognition of his distinguished service, he was made Honorary Curator of the Museum.

The Carnegie Foundation granted Professor Goodale a retiring allowance in September, 1909. He died at Cambridge, Massachusetts, April 12, 1923.

MRS. GEORGIA KENDRICK

Mrs. Georgia Kendrick was born at Rochester, New York, July 16, 1848. In 1880 she was married to James Ryland Kendrick, and came to live at Vassar College when her husband was acting president in 1885–86. Her interest in the welfare of the students and her unusual influence on their intellectual and social life led to her choice as Lady Principal of the college in 1891. This post, which corresponded in all essentials to that of Dean, she held for twenty-two years, retiring in 1913.

The Carnegie Foundation granted Mrs. Kendrick a retiring allowance in July, 1913. She died December 14, 1922.

WILLIAM KEYSOR

William Keysor was born June 9, 1852. He graduated from the University of Minnesota and from the Washington University Law School, and entered the profession of law. In 1902 he resigned a judgeship at Omaha, Nebraska, to become professor of law at Washington University, St. Louis. This position he held for fifteen years, retiring in 1917.

The Carnegie Foundation granted Professor Keysor a retiring allowance in July, 1917. He died at Kirkwood, Missouri, August 17, 1922.

ANDREW WALKER McALESTER

Andrew Walker McAlester was born at Rocheport, Missouri, January 1, 1841. After graduating from the University of Missouri in 1864, he attended the Rush Medical College in Chicago and later the St. Louis Medical College. In 1873 he was made professor of surgery in the school of medicine of the University of Missouri, and dean of the faculty in 1880. From 1900 to 1906 he was also superintendent of the Parker Memorial Hospital connected with the University. He retired in 1909 after a continuous service of thirty-six years.

Dr. McAlester was a member of the American Medical Association and an honorary fellow of the American College of Surgeons. He was president of the Missouri State Medical Association in 1888, and president of the Missouri State Board of Health for four years. Some years after his retirement from active service he was appointed Health Commissioner of the State of Missouri and served for two years.

The Carnegie Foundation granted Dr. McAlester a retiring allowance in July, 1909. He died November 2, 1922, at Columbia, Missouri.

JAMES McLAREN McBRYDE

James McLaren McBryde was born at Abbeville, South Carolina, January 1, 1841. He was educated at South Carolina College and the University of Virginia, but entered the Confederate Army before graduating from the latter institution. Having had practical experience in farming and in the organization of agricultural interests, he was asked in 1879 to become the head of the newly created department of agriculture of the University of Tennessee. Three years later he accepted a professorship in botany at the South Carolina College, and a year later was elected its president. Under his administration the institution became the State University with Dr. McBryde as its president and also as director of the agricultural experiment station. In 1891 he was chosen president of the Virginia Agricultural and Mechanical College, at that time an institution with practically no buildings and a small student body. Under his guidance, during sixteen years, this institution, which was then called the Virginia Polytechnic Institute, became conspicuous among the technical schools of the south, with a registration of seven hundred students when he retired in 1907.

The Carnegie Foundation granted Dr. McBryde a retiring allowance in September, 1907. He died in New Orleans, March 20, 1923.

EDWARD WILLIAMS MORLEY

Edward Williams Morley was born at Newark, New Jersey, in 1838. He was graduated from Williams College in 1860 and received a master's degree there in 1863. In 1869 he began teaching at Western Reserve College, then a small insti-

tution at Hudson, Ohio. He continued in his post when the institution moved to Cleveland in 1882 and became Adelbert College of Western Reserve University.

Professor Morley's discoveries are known throughout the world of science. He was the first scientist to determine the atomic weights of oxygen and hydrogen, devoting fifteen years to this problem. His experiments on ether drift, begun in 1887, and continued in coöperation with Professor Miller of the Case School of Applied Science and Professor Michelson of the University of Chicago, underlie the theory of relativity. During all his years of research work, Professor Morley continued to teach at Western Reserve University, retiring in 1906 after thirty-seven years of service.

Professor Morley was a member of many scientific and learned societies in this country and in England, and president of the American Academy of Arts and Sciences and of the American Chemical Society.

The Carnegie Foundation, in July, 1906, granted Professor Morley a retiring allowance. He died at West Hartford, Connecticut, February 24, 1923.

CORNELIUS WORTENDYKE MORROW

Cornelius Wortendyke Morrow was born in Brooklyn, New York, February 8, 1855. He was graduated from Columbia University in 1876 and from the Union Theological Seminary in 1879. He was ordained into the ministry of the Congregational Church in 1885, and for seventeen years held pastorates in various churches in Connecticut. In 1902 he was appointed professor of philosophy at Fisk University, Nashville, Tennessee, where he was also college pastor until 1912. He became dean of the University in 1912, and held this post until his retirement in 1920.

The Carnegie Foundation granted Dean Morrow a retiring allowance in July, 1921. He died at Nashville, Tennessee, March 28, 1923.

SIMON NELSON PATTEN

Simon Nelson Patten was born May 1, 1852, and spent his early years on a farm in Illinois, attending the district school until the age of seventeen. After having graduated from Jennings Seminary, at Aurora, Illinois, in 1874, he attended Northwestern University for a short time and then went abroad for study at the University of Halle. Here, under the guidance of distinguished teachers, he gained his first knowledge of political economy, the special field of his later prominence. Returning to the United States in 1878, he began the study of law in Chicago, but abandoned this and for ten years was a teacher and principal in secondary schools in Illinois and Iowa. During this period he was at work on his first book, *The Premises of Political Economy*, which immediately brought him recognition. In 1888 he was appointed professor of political economy at the University of Pennsylvania, and from that time until his retirement from active service in 1917 was associated with that institution. He was

conspicuously successful as a teacher, and the author of a dozen widely read books in the field of political economy and sociology.

Professor Patten was one of the founders of the American Academy of Political and Social Science, and at one time was president of the American Economic Association.

The Carnegie Foundation granted Professor Patten a retiring allowance in July, 1917. He died July 24, 1922.

JAMES KENNEDY PATTERSON

James Kennedy Patterson was born in Glasgow, Scotland, March 26, 1833. He came to America in 1842, and in 1851 entered Hanover College, Indiana. From the time of his graduation there in 1856 until he retired from active service in 1910, a period of fifty-four years, his life was devoted to the cause of education in the South. After thirteen years spent in teaching in Tennessee and Kentucky, he became in 1869 president of the Agricultural and Mechanical College of Kentucky at Lexington. At that time it was an institution practically without equipment or resources. When he retired from the presidency in 1910, after a service of forty-one years, the institution had become the State University with adequate equipment and support.

While President Patterson's greatest accomplishment was the development of the institution now known as the University of Kentucky, he was deeply interested in all phases of education. In 1903 he was president of the Association of Land Grant Colleges, and was frequently a delegate to national and international educational conventions. He was a fellow of the Royal Historical Society of Great Britain, and of the Society of Antiquaries of Scotland, and a member of many educational and literary societies in America. He was well known as a public speaker of distinction and a writer on political and economic subjects.

The Carnegie Foundation granted President Patterson a retiring allowance in January, 1910. He died at Lexington, Kentucky, August 15, 1922.

ALBIN PUTZKER

Albin Putzker was born at Eisenstadt, Bohemia, February 24, 1845. He was educated at Prague, and in 1866 came to the United States, where he engaged in the private teaching of modern languages. In 1867 he became a teacher of modern languages in Adelphi Academy, at Brooklyn, New York. He held this position for five years, when he was appointed principal of the Santa Barbara College in California. The following year he went to the University of California as instructor in German, being promoted to a professorship in 1883. He retired in 1910 after thirty-six years of service at the University of California.

The Carnegie Foundation granted Professor Putzker a retiring allowance in July, 1910. He died at Berkeley, California, May 1, 1923.

ROBERT LOUIS SANDERSON

Robert Louis Sanderson was born at Laon, France, July 12, 1851, and was educated in French schools and at the University of Paris. His academic career in this country began in 1885, when he was appointed instructor in French at Harvard University. He remained at Harvard for ten years, and in 1900 became associated with Yale University, first as instructor in French and later as assistant professor, which position he held until his retirement in 1919.

Professor Sanderson was a member of the Modern Language Association of America, the president of the Alliance Française of New Haven, and the author and translator of a number of books.

The Carnegie Foundation granted Professor Sanderson a retiring allowance in July, 1919. He died at Duxbury, Massachusetts, November 6, 1922.

BENJAMIN SLOAN

Benjamin Sloan was born at Pendleton, South Carolina, April 15, 1836. He was educated at the Citadel Academy at Charleston, and in 1855 entered the United States Military Academy at West Point. Upon graduation he entered the United States Army as first lieutenant, but with the Civil War he joined the Confederate Army, rising to the rank of major in the ordnance department. At the close of the war he contributed to the reconstruction and upbuilding of his native state by devoting himself to the education of young men in scientific and industrial pursuits. For thirty-five years he taught in academies and colleges in South Carolina, retiring in 1908 at the age of seventy-two. For the last twenty-eight years of his active career he was professor of applied mathematics at South Carolina College, afterwards the University of South Carolina, and was its president from 1902 to 1908.

The Carnegie Foundation granted Major Sloan a retiring allowance in June, 1908. He died at Biltmore, North Carolina, February 19, 1923.

ALEXANDER SMITH

Alexander Smith was born in Edinburgh, Scotland, on September 11, 1865. He was graduated from the University of Edinburgh in 1886, and after receiving a doctorate in philosophy at the University of Munich in 1889, was appointed assistant in chemistry at the University of Edinburgh. The following year he came to America, and for four years was professor of chemistry and mineralogy at Wabash College. In 1894 he was appointed assistant professor of chemistry at the University of Chicago, and during the seventeen years of his service there became head of the department of chemistry and also dean of the Junior Colleges. In 1911 he came to

Columbia University as head of the department of chemistry, and remained in this post until his retirement in 1921.

Professor Smith was the author of a number of well-known text-books in chemistry, several of which have been translated into foreign languages.

The Carnegie Foundation granted Professor Smith a retiring allowance in July, 1921. He died at Edinburgh, Scotland, September 9, 1923.

JAMES McBRIDE STERRETT

James McBride Sterrett was born at Howard, Pennsylvania, January 13, 1847. He was educated at the University of Rochester, and at Harvard University and the Episcopal Theological School at Cambridge, Massachusetts. He was ordained priest in the Protestant Episcopal Church in 1873, and some years later was appointed professor of ethics at the Seabury Divinity School at Faribault, Minnesota. In 1892 he accepted the chair of philosophy at George Washington University, which post he held until his retirement from active service in 1909.

Professor Sterrett was the author of several books on religion and philosophy, and for many years was president of the Society for Philosophical Inquiry.

The Carnegie Foundation granted Professor Sterrett a retiring allowance in September, 1909. He died at Washington, May 31, 1923.

JOHN TROWBRIDGE

John Trowbridge was born in Boston, Massachusetts, August 5, 1843. After attending the Boston Latin School, he entered the Lawrence Scientific School, from which he graduated in 1865. The following year he became tutor in physics at Harvard University, and except for one year at the Massachusetts Institute of Technology as assistant professor of physics, he spent the remainder of his life at Harvard, his service there extending over forty years. Early in his career he realized the meagre facilities for the development of laboratory methods, and planned and had constructed the Jefferson Physical Laboratory, of which he was director for thirty years. A large part of his time was spent in experimental investigation, and under his inspiration and guidance many men became interested in research and won scientific distinction.

Professor Trowbridge was a member of the National Academy of Sciences and the American Philosophical Society, and a fellow of the American Academy of Arts and Sciences. He wrote many papers on physics, particularly concerning electricity.

The Carnegie Foundation granted Professor Trowbridge a retiring allowance in September, 1910. He died February 18, 1923, at Cambridge, Massachusetts.

ADDISON VAN NAME

Addison Van Name was born at Binghamton, New York, November 15, 1835. He graduated with high honors at Yale University in 1858, and spent the two following years in German universities. In 1862 he was appointed tutor at Yale, and in 1865 he succeeded Professor Daniel C. Gilman as librarian at Yale. He held this position for forty years, retiring in 1905.

Besides having an accurate knowledge of all matters connected with library work, Professor Van Name was a distinguished linguist and traveler, and wrote extensively on Oriental topics. At the time of his death, at the age of eighty-seven, he was the last survivor of the Yale faculty of the Civil War period.

The Carnegie Foundation granted Professor Van Name a retiring allowance in July, 1906. He died at New Haven, Connecticut, September 29, 1922.

ROBERT WHEELER WILLSON

Robert Wheeler Willson was born at West Roxbury, Massachusetts, July 20, 1853. He was educated in the public schools of Salem, and was graduated from Harvard College in 1873. Being interested in the study of astronomy, he at once accepted a position as assistant in the Argentine National Observatory, and on his return to America was appointed assistant at the Harvard Observatory. Six years later he became assistant astronomer in the Winchester Observatory at Yale. In 1884 he went to Germany to pursue his studies, and received a doctor's degree from the University of Wurzburg in 1886. Returning to New England, he devoted himself to scientific investigation for several years, but in 1891 again resumed teaching, as instructor in physics and astronomy at Harvard University. By his zeal and enthusiasm Professor Willson succeeded in developing substantial facilities for laboratory instruction in astronomy, and himself devised the apparatus for the astronomical laboratory.

Professor Willson was a fellow of the American Academy of Arts and Sciences and the author of several books on astronomical subjects.

The Carnegie Foundation granted Professor Willson a retiring allowance in September, 1919. He died November 1, 1922, at Cambridge, Massachusetts.

REPORT OF THE TREASURER

REPORT OF THE TREASURER

To the Chairman and Trustees of the Carnegie Foundation for the Advancement of Teaching:

In accordance with the provisions of Article IX of the By-laws, the chairman of the board of trustees designated Messrs. Leslie, Banks & Co., chartered public accountants, to audit the accounts of the Foundation for the fiscal year ending June 30, 1923. The books of the treasurer were accordingly turned over to this firm, whose report follows.

August 8, 1923

The Board of Trustees, Carnegie Foundation for the Advancement of Teaching, New York.

Dear Sirs: Pursuant to your instructions, we have audited the accounts of the Treasurer of the Carnegie Foundation for the Advancement of Teaching for the fiscal year ended June 30, 1923, and submit herewith our report.

We verified the securities representing the investments by actual count and inspection, the cash in banks by direct communication with the depositories, and cash on hand by actual count.

During the year under review $2,234,000 par value of securities were sold, resulting in a profit of $65,785.04, which may be summarized as follows:

	Par Value	*Book Value*	*Amount Received*	*Profit*
Reserve Fund No. 1	$2,068,000.00	$1,867,904.93	$1,927,930.00	$60,025.07
Reserve Fund No. 2	80,000.00	78,980.75	83,362.50	4,381.75
Emergency Reserve Fund	86,000.00	85,257.28	86,635.50	1,378.22
	$2,234,000.00	$2,032,142.96	$2,097,928.00	$65,785.04

The securities purchased during the year amounted to $3,187,000 par value, costing $3,039,840.99, which may be summarized as follows:

	Par Value	*Cost*
Division of Educational Enquiry	$15,000.00	$15,487.50
Reserve Fund No. 1	2,812,000.00	2,667,690.36
Reserve Fund No. 2	210,000.00	203,136.25
Emergency Reserve Fund	150,000.00	153,526.88

The income from investments and the Carnegie Corporation has been duly accounted for.

We hereby certify that, in our opinion, the respective Balance Sheets appended hereto show the true financial condition of the Foundation at June 30, 1923.

Yours very truly,

LESLIE, BANKS & CO.,
Chartered Accountants.

CONSOLIDATED BALANCE SHEET

AT JUNE 30, 1923

	Total	*General Fund (per Sch. A)*	*Division of Educational Enquiry (per Sch. B)*	*Reserve Fund No. 1 (per Sch. C)*	*Reserve Fund No. 2 (per Sch. D)*	*Emergency Reserve Fund (per Sch. E)*
Funds and Surplus:						
Funds	$24,722,895.24	$15,150,000.00	$1,242,500.00	$7,324,790.61	$644,164.56	$361,440.07
Surplus	2,450,722.08	200,034.63	58,571.26	2,017,963.95	101,600.95	72,551.29
Total Funds and Surplus	$27,173,617.32	$15,350,034.63	$1,301,071.26	$9,342,754.56	$745,765.51	$433,991.36
Assets:						
Investments	$26,669,916.05	$15,160,260.47	$1,258,558.73	$9,108,767.98	$721,125.46	$421,203.41
Cash	243,713.69	29,726.10	30,552.79	156,368.79	18,865.06	8,200.95
Accrued Interest Receivable	234,163.12	137,899.18	8,284.16	77,617.79	5,774.99	4,587.00
Office Furniture	25,824.46	22,148.88	3,675.58			
Total Assets	$27,173,617.32	$15,350,034.63	$1,301,071.26	$9,342,754.56	$745,765.51	$433,991.36

Schedule A

GENERAL FUND

BALANCE SHEET AT JUNE 30, 1923

Endowed Fund and Surplus

ENDOWED FUND:			
Original Fund		$15,000,000.00	
Accumulation		150,000.00	$15,150,000.00
SURPLUS INCOME:			
At June 30, 1922		$291,283.55	
Surplus Income for year 1922–23 (per Schedule F)		308,138.61	
Bond Discount amortized for year 1922–23		612.47	
		$600,034.63	
LESS:			
Transferred to Other Funds:			
Reserve Fund No. 1 (per Sch. C)	$250,000.00		
Reserve Fund No. 2 (per Sch. D)	100,000.00		
Emergency Reserve Fund (per Sch. E)	50,000.00	400,000.00	
SURPLUS INCOME AT JUNE 30, 1923			200,034.63
TOTAL ENDOWMENT FUND AND SURPLUS			$15,350,034.63

Assets

INVESTMENTS (per Schedule G)		$15,160,260.47	
CASH		29,726.10	
ACCRUED INTEREST RECEIVABLE (per Schedule G)		137,899.18	
OFFICE FURNISHINGS:			
At June 30, 1922	$41,606.45		
Additions	684.83		
	$42,291.28		
Less Reserve for Depreciation	20,142.40	22,148.88	
TOTAL ASSETS			$15,350,034.63

Schedule B

DIVISION OF EDUCATIONAL ENQUIRY

BALANCE SHEET AT JUNE 30, 1923

Endowed Fund and Surplus

ENDOWED FUND		$1,242,500.00
SURPLUS INCOME:		
At June 30, 1922	$30,525.07	
Surplus Income for year 1922–23 (per Schedule F)	28,043.66	
Bond Discount amortized for year 1922–23	2.53	
SURPLUS INCOME AT JUNE 30, 1923		58,571.26
TOTAL ENDOWMENT FUND AND SURPLUS		$1,301,071.26

Assets

INVESTMENTS (per Schedule H)		$1,258,558.73	
CASH		30,552.79	
ACCRUED INTEREST RECEIVABLE (per Schedule H)		8,284.16	
OFFICE FURNISHINGS:			
At June 30, 1922	$6,853.67		
Additions	74.35		
	$6,928.02		
Less Reserve for Depreciation	3,252.44	3,675.58	
TOTAL ASSETS			$1,301,071.26

Schedule C

RESERVE FUND NO. 1

BALANCE SHEET AT JUNE 30, 1923

Fund

FROM CARNEGIE CORPORATION OF NEW YORK:			
At June 30, 1922			$4,487,831.25
TRANSFERRED FROM GENERAL FUND:			
At June 30, 1922		$2,427,153.77	
During year 1922–23		250,000.00	2,677,153.77
PROFIT ON SALE OF SECURITIES:			
At June 30, 1922		$99,780.52	
During year 1922–23 (per Schedule M)		60,025.07	159,805.59
			$7,324,790.61
INCOME:			
At June 30, 1922		$1,521,189.97	
For year 1922–23:			
From Investments (per Schedule J)	$475,937.62		
From Interest on Bank Deposits	414.65		
Bond Discount amortized	20,421.71	496,773.98	2,017,963.95
TOTAL FUND			$9,342,754.56

Assets

INVESTMENTS (per Schedule J)	$9,108,767.98	
CASH	156,368.79	
ACCRUED INTEREST RECEIVABLE (per Schedule J)	77,617.79	
TOTAL ASSETS		$9,342,754.56

Schedule D

RESERVE FUND NO. 2

BALANCE SHEET AT JUNE 30, 1923

Fund

TRANSFERRED FROM GENERAL FUND:			
At June 30, 1922	$518,346.41		
During year 1922–23	100,000.00	$618,346.41	
PROFIT ON SALE OF SECURITIES:			
At June 30, 1922	$21,436.40		
During year 1922–23 (per Schedule M)	4,381.75	25,818.15	$644,164.56
INCOME:			
At June 30, 1922		$72,796.58	
For year 1922–23:			
From Investments (per Schedule K)	$43,807.57		
From Interest on Bank Deposits	187.90	43,995.47	
		$116,792.05	
LESS:			
Gifts and Expenses from Income:			
Retiring Allowances	$13,320.00		
Contributions for Annuities	1,227.04		
Bond Premium Amortized	644.06	15,191.10	101,600.95
TOTAL FUND			$745,765.51

Assets

INVESTMENTS (per Schedule K)	$721,125.46	
CASH	18,865.06	
ACCRUED INTEREST RECEIVABLE (per Schedule K)	5,774.99	
TOTAL ASSETS		$745,765.51

Schedule E

EMERGENCY RESERVE FUND

BALANCE SHEET AT JUNE 30, 1923

Fund

TRANSFERRED FROM GENERAL FUND:			
At June 30, 1922		$300,000.00	
During 1922–23		50,000.00	$350,000.00
PROFIT ON SALE OF SECURITIES:			
At June 30, 1922		$10,061.85	
During 1922–23 (per Schedule M)		1,378.22	11,440.07
			$361,440.07
INCOME:			
At June 30, 1922		$50,184.46	
For year 1922–23			
From Investments (per Schedule L)	$21,087.93		
From Interest on Bank Deposits	167.80		
Bond Discount Amortized	1,111.10	22,366.83	72,551.29
TOTAL FUND			$433,991.36

Assets

INVESTMENTS (per Schedule L)	$421,203.41	
CASH	8,200.95	
ACCRUED INTEREST RECEIVABLE (per Schedule L)	4,587.00	
TOTAL ASSETS		$433,991.36

Schedule F

STATEMENT OF INCOME AND EXPENDITURES

YEAR ENDED JUNE 30, 1923

Income

	General Fund	*Division of Educational Enquiry*
From Investments	$754,070.00	$53,307.50
From Carnegie Corporation of New York	700,000.03	
From Interest on Bank Deposits	1,581.41	528.96
TOTAL INCOME	$1,455,651.44	$53,836.46

Expenditures

DEDUCT:		
Retiring Allowances	$1,065,774.85	
Salaries	47,919.67	$850.50
Publication	5,400.00	1,047.70
Study of Legal Education		9,059.88
Study of Training of Teachers		3,968.43
Study of Dental Education		2,700.00
Study of Intercollegiate Athletics		438.40
Study of Education in Maritime Provinces		575.01
Office Rent	9,651.00	4,806.00
Traveling Expenses	2,534.26	
Professional Fees	3,993.50	200.00
Postage	547.75	422.25
Telephone and Telegraph	222.09	178.66
Rent of Safe Deposit Box	950.00	50.00
Printing and Stationery	3,300.25	509.33
Electric Current	80.43	39.34
Sundries	2,978.38	261.93
TOTAL EXPENDITURES	$1,143,352.18	$25,107.43
Depreciation of Office Furnishings	4,160.65	685.37
TOTAL EXPENDITURE AND DEPRECIATION	$1,147,512.83	$25,792.80
SURPLUS INCOME FOR YEAR	$308,138.61	$28,043.66

Schedule G

INVESTMENTS AND INCOME THEREON

GENERAL ENDOWMENT

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Atchison, Topeka & Santa Fe R. R. Co. Transcontinental Short Line First Mtge. 4% Gold Bonds. Due July 1, 1958	$24,000.00	$22,604.55	Jan. & July		$960.00		$960.00
Atchison, Topeka & Santa Fe R. R. Co. General Mtge. 4% Bonds. Due October 1, 1995	25,000.00	24,660.82	Apr. & Oct.	$250.00	1,000.00	$250.00	1,000.00
Carolina, Clinchfield & Ohio R. R. Co. First Mtge. 5% Bonds. Due June 1, 1938	200,000.00	194,296.47	June & Dec.	833.34	10,000.00	833.34	10,000.00
Chicago, Milwaukee & St. Paul R. R. Co. 25 year 4% Gold Bonds. Due July 1, 1934	25,000.00	24,197.43	Jan. & July		1,000.00		1,000.00
Chicago, Milwaukee & St. Paul R. R. Co. General and Refunding 4½% Bonds. Due January 1, 2014	250,000.00	241,473.04	Apr. & Oct.	2,812.50	11,250.00	2,812.50	11,250.00
Duluth, Missabe & Northern R. R. Co. General Mtge. 25 year 5% Gold Bonds. Due January 1, 1941	114,000.00	118,100.20	Jan. & July		5,700.00		5,700.00
H. C. Frick Coke Co., Pittsburgh, Monongahela, First Lien Purchase Money 5% Gold Bonds. Due 1925–1944	1,300,000.00	1,305,627.74	Jan. & July		65,000.00		65,000.00
Illinois Central R. R. Co. (Louisville Division) & Terminal First Mtge. Registered 3½% Gold Bonds. Due July 1, 1953	200,000.00	177,585.03	Jan. & July		7,000.00		7,000.00
Oregon Railroad & Navigation Co. Consolidated Mtge. 4% Gold Bonds. Due June 1, 1946	15,000.00	14,725.19	June & Dec.	50.00	600.00	50.00	600.00
Oregon Short Line R. R. Co. Refunding 4% Gold Bonds. Due December 1, 1929	5,000.00	4,857.25	June & Dec.	16.67	200.00	16.67	200.00
Southern Pacific R. R. Co. First and Refunding 4% Gold Bonds. Due January 1, 1955	20,000.00	18,681.95	Jan. & July		800.00		800.00
Union Pacific R. R. Co. First Lien & Refunding Mtge. 4% Bonds. Due March 1, 2008	14,000.00	13,450.80	Mar. & Sept.	186.67	560.00	186.67	560.00
Union R. R. Co. First Mtge. 5% Bonds. Due September 1, 1946	1,000,000.00	1,000,000.00	Mar. & Sept.	16,666.67	50,000.00	16,666.67	50,000.00
U. S. Steel Corporation, Series "A" Registered 50 year 5% Gold Bonds. Due April 1, 1951	2,000,000.00	2,000,000.00	Jan. & July		100,000.00		100,000.00
U. S. Steel Corporation, Series "B" Registered 50 year 5% Gold Bonds. Due April 1, 1951	2,850,000.00	2,850,000.00	Feb. & Aug.	59,375.00	142,500.00	59,375.00	142,500.00
U. S. Steel Corporation, Series "D" Registered 50 year 5% Gold Bonds. Due April 1, 1951	2,850,000.00	2,850,000.00	Apr. & Oct.	35,625.00	142,500.00	35,625.00	142,500.00
U. S. Steel Corporation, Series "E" Registered 50 year 5% Gold Bonds. Due April 1, 1951	1,000,000.00	1,000,000.00	May & Nov.	8,333.33	50,000.00	8,333.33	50,000.00
U. S. Steel Corporation, Series "F" Registered 50 year 5% Gold Bonds. Due April 1, 1951	3,300,000.00	3,300,000.00	June & Dec.	13,750.00	165,000.00	13,750.00	165,000.00
	$15,192,000.00	$15,160,260.47		$137,899.18	$754,070.00	$137,899.18	$754,070.00

Schedule H

INVESTMENTS AND INCOME THEREON

DIVISION OF EDUCATIONAL ENQUIRY

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Canadian Pacific Railway Company 4% Consolidated Debenture Stock	$150,000.00	$116,812.50	Jan. & July		$6,000.00		$6,000.00
Chicago & Northwestern Railway Company General Mtge. 4% Gold Bonds. Due November 1, 1987	1,000,000.00	1,000,000.00	May & Nov.	$6,666.66	40,000.00	$6,666.66	40,000.00
Cedar Rapids Manufacturing & Power Company First Mortgage 5% Bonds. Due January 1, 1953	30,000.00	27,502.02	Jan. & July		1,500.00		1,500.00
Louisville & Nashville R. R. Company First and Refunding Mtge. Series "A" 5½% Bonds. Due April 1, 2003	50,000.00	50,490.78	Apr. & Oct.	687.50	2,750.00	687.50	2,750.00
New York Telephone Company Refunding Mtge. 20 year 6% Gold Bonds, Series "A." Due October 1, 1941[1]	62,000.00	63,753.43	Apr. & Oct.	705.00	2,832.50	930.00	3,057.50
	$1,292,000.00	$1,258,558.73		$8,059.16	$53,082.50	$8,284.16	$53,307.50

[1] Additional purchase during year 1922-23.

Schedule J

INVESTMENTS AND INCOME THEREON

RESERVE FUND NO. 1

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Adirondack Power & Light Company First Mortgage 6% Bonds. Due March 1, 1950 [1]	$50,000.00	$50,185.35	Mar. & Sept.	$600.00	$1,987.50	$1,000.00	$2,387.50
Alabama Power Company First Mortgage 6% Bonds. Due June 1, 1951	80,000.00	78,743.05	June & Dec.	400.00	4,800.00	400.00	4,800.00
Alberta (Can.), Province of, 5½% Bonds. Due Jan., 1947	50,000.00	51,637.95	Jan. & July		2,750.00		2,750.00
American Thread Co. First Mortgage 6% Bonds. Due December 1, 1928	20,000.00	20,122.65	June & Dec.	100.00	1,200.00	100.00	1,200.00
Appalachian Power Co. First Mortgage 5% Bonds. Due June 1, 1941 [1]	50,000.00	45,007.20	June & Dec.		1,030.83	208.33	1,239.16
Armour & Company Real Estate First Mortgage 4½% Bonds. Due June 1, 1939 [1]	50,000.00	46,068.87	June & Dec.		1,581.25	187.50	1,768.75
Atchison, Topeka & Santa Fe Railway Convertible 4% Bonds. Due June 1, 1955	10,000.00	8,168.53	June & Dec.	33.33	400.00	33.33	400.00
Atchison, Topeka & Santa Fe Railway Transcontinental Short Line First Mortgage 4% Bonds. Due July 1, 1958	26,000.00	24,488.32	Jan. & July		1,040.00		1,040.00
Atchison, Topeka & Santa Fe Railway General Mtge. 4% Bonds. Due October 1, 1995 [2]			Apr. & Oct.	1,750.00	3,247.23		1,497.23
Baltimore & Ohio Railroad Company Prior Lien 3½% Bonds. Due July 1, 1925	250,000.00	240,664.99	Jan. & July		8,750.00		8,750.00
Baltimore & Ohio Railroad Company (Southwestern Division) First Mtge. 3½% Gold Bonds. Due July 1, 1925	50,000.00	49,525.17	Jan. & July		1,750.00		1,750.00
Baltimore & Ohio Railroad Company (Pittsburgh, Lake Erie & West Va. System) Refunding 4% Bonds. Due November 1, 1941	55,000.00	52,084.76	May & Nov.	366.67	2,200.00	366.67	2,200.00
Brooklyn Union Gas Co. First & Refunding Mortgage 6% Bonds. Due May 1, 1947	100,000.00	104,548.55	May & Nov.	1,000.00	6,000.00	1,000.00	6,000.00
Canada, Dominion of, 5½% Bonds. Due August 1, 1929 [2]			Feb. & Aug.	343.75	426.25		82.50
Canada, Dominion of, 5½% Bonds. Due Nov. 1, 1934	45,000.00	43,038.71	May & Nov.	412.50	2,475.00	412.50	2,475.00
Canada, Dominion of, 5% Bonds. Due March 1, 1937 [2]			Mar. & Sept.	2,083.33	3,774.31		1,690.98
Canada, Dominion of, 30 year Mortgage 5% Bonds. Due May 1, 1952 [1]	225,000.00	224,728.34	May & Nov.	1,666.67	11,041.67	1,875.00	11,250.00
Carried forward	$1,061,000.00	$1,039,012.44		$8,756.25	$54,454.04	$5,583.33	$51,281.12

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Brought forward	$1,061,000.00	$1,039,012.44		$8,756.25	$54,454.04	$5,583.33	$51,281.12
Canada, Southern, First & Refunding Consolidated Mortgage 5% Bonds. Due October 1, 1962	50,000.00	48,545.30	Apr. & Oct.	625.00	2,500.00	625.00	2,500.00
Chesapeake & Ohio R.R. Co. Equipment Trust 5½% Bonds. Due June 1, 1934–37[1]	50,000.00	50,872.71	June & Dec.		2,230.56	229.16	2,459.72
Chesapeake & Ohio R. R. Co. Consolidated 5% Bonds. Due May 1, 1939[2]			May & Nov.	416.67	2,569.44		2,152.77
Chesapeake & Ohio R. R. Co. 30 year Convertible Secured Mtge. 5% Bonds. Due April 1, 1946[1]	75,000.00	70,478.38	Apr. & Oct.	625.00	2,916.67	937.50	3,229.17
Chicago, Burlington & Quincy R. R. Co. (Illinois Division) First Mtge. 4% Bonds. Due July 1, 1949[2]			Jan. & July		394.45		394.45
Chicago, Burlington & Quincy R. R. Co. (Illinois Division) 3½% Bonds. Due July 1, 1949[2]			Jan. & July		3,689.58		3,689.58
Chicago, Burlington & Quincy R. R. Co. General Mtge. (Registered) 4% Bonds. Due March 1, 1958	50,000.00	44,257.74	Mar. & Sept.	666.66	2,000.00	666.66	2,000.00
Chicago, Burlington & Quincy R. R. Co. First Refunding Mtge. Series "A" 5% Bonds. Due February 1, 1971	100,000.00	98,786.16	Feb. & Aug.	2,083.33	5,000.00	2,083.33	5,000.00
Chicago, Indiana & Southern R. R. Co. Consolidated Mtge. 4% Bonds. Due January 1, 1956	130,000.00	107,017.30	Jan. & July		5,200.00		5,200.00
Chicago, Milwaukee & St. Paul R. R. Co. 25 year 4% Gold Bonds. Due July 1, 1934	75,000.00	72,592.29	Jan. & July		3,000.00		3,000.00
Chicago, Milwaukee & St. Paul R.R. Co. General & Refunding Series "A" 4½% Gold Bonds. Due Jan. 1, 2014	500,000.00	347,000.65	Apr. & Oct.	5,625.00	22,500.00	5,625.00	22,500.00
Chicago & Northwestern R. R. 15 year Secured Mtge. 6½% Bonds. Due March 1, 1936[1]	100,000.00	110,023.01	Mar. & Sept.	1,061.67	4,129.13	2,166.67	5,234.13
Chicago & Northwestern R. R. General Mortgage 5% Gold Bonds. Due November 1, 1987[2]			May & Nov.	1,250.00	4,923.62		3,673.62
Chicago, Rock Island & Pacific Railway Co. Refunding Mortgage 4% Bonds. Due April 1, 1934[1]	25,000.00	20,301.27	Apr. & Oct.		152.78	250.00	402.78
Chicago & Western Indiana Consolidated Mortgage 4% Bonds. Due July 1, 1952	50,000.00	38,457.71	Jan. & July		2,000.00		2,000.00
Cleveland, Cincinnati, Chicago & St. Louis (Cairo Division) First Mtge. 4% Bonds. Due January 1, 1939[1]	40,000.00	36,100.20	Jan. & July		1,284.44		1,284.44
Cleveland & Pittsburgh R.R. Company Series "D" General Mortgage 3½% Bonds. Due August 1, 1950	50,000.00	41,714.60	Feb. & Aug.	729.16	1,750.00	729.16	1,750.00
Cleveland & Pittsburgh R. R. Company Series "B" General Mortgage 4½% Bonds. Due August 1, 1942	18,000.00	16,037.27	Apr. & Oct.	202.50	810.00	202.50	810.00
Carried forward	$2,374,000.00	$2,141,197.03		$22,041.24	$121,504.71	$19,098.31	$118,561.78

[1] Denotes purchase during year 1922-23. [2] Denotes sale during year 1922-23.

Brought forward	$2,374,000.00	$2,141,197.03		$22,041.24	$121,504.71	$19,098.31	$118,561.78
Cleveland & Pittsburgh R.R. Company Series "A" General Mortgage 4½% Bonds. Due January 1, 1942	182,000.00	175,983.14	Jan. & July		8,190.00		8,190.00
Commonwealth Edison Company First Mortgage 5% Bonds. Due June 1, 1943[1]			Mar. & Sept.	500.00	1,695.84		1,195.84
Consolidated Coal Company First & Refunding Mtge. 5% Bonds. Due December 1, 1950	40,000.00	35,393.68	June & Dec.	166.67	2,000.00	166.67	2,000.00
Cumberland Telephone & Telegraph Company First & General Mortgage 5% Bonds. Due January 1, 1937[2]	50,000.00	47,745.60	Jan. & July		1,805.55		1,805.55
Dallas Power & Light Company First Mortgage 6% Bonds. Due July 1, 1949	50,000.00	50,358.54	Jan. & July		3,000.00		3,000.00
Delaware & Hudson Company 10 year 7% Bonds. Due June 1, 1930[2]	30,000.00	31,600.00	June & Dec.	58.33	587.22	175.00	703.89
Delaware & Hudson Company First and Refunding Mortgage 4% Bonds. Due May 1, 1943[1]			May & Nov.	666.67	1,777.78		1,111.11
Denver & Rio Grande Western R. R. Co. 5½% Equipment Trust Certificates. Due March 1, 1927[2]	25,000.00	24,838.86	Mar. & Sept.		198.61	465.00	266.39
Detroit Edison Company First & Refunding Mortgage Series "A" 5% Bonds. Due July 1, 1940	20,000.00	18,186.44	Mar. & Sept.	333.33	1,000.00	333.33	1,000.00
Detroit Edison Company, First & Refunding Mortgage Series "B" 6% Bonds. Due July 1, 1940	50,000.00	51,176.26	Mar. & Sept.	1,000.00	3,000.00	1,000.00	3,000.00
Duquesne Light & Power Company First Mortgage 6% Bonds. Due July 1, 1949	50,000.00	51,798.97	Jan. & July		3,000.00		3,000.00
General Electric Company 5% Debenture Bonds. Due September 1, 1952	50,000.00	45,015.72	Mar. & Sept.	1,666.67	5,097.20	833.33	4,263.86
Georgia Railway & Power Company 25 year General Mortgage 6% Bonds. Due April 1, 1947	50,000.00	47,610.78	Apr. & Oct.	750.00	3,000.00	750.00	3,000.00
Great Northern Railway Company General Mortgage Series "A" 7% Gold Bonds. Due July 1, 1936[2]	375,000.00	371,492.99	Jan. & July		25,900.00		25,900.00
Great Western Power Company First Mortgage 5% Bonds. Due July 1, 1946	60,000.00	55,940.73	Jan. & July		3,000.00		3,000.00
Idaho Power Company 30 year First Mtge. 5% Bonds. Due January 1, 1947[2]	25,000.00	23,085.10	Jan. & July		1,250.00		1,250.00
Illinois Central 15 year Secured Mortgage 6½% Bonds. July 1, 1936[2]	25,000.00	27,675.30	Jan. & July		1,083.33		1,083.33
Illinois Central Refunding Mortgage Registered 4% Bonds. Due November 1, 1955	150,000.00	132,264.09	May & Nov.	1,000.00	6,000.00	1,000.00	6,000.00
Illinois Power & Light Corporation First & Refunding Mortgage 6% Bonds. Due April 1, 1953[2]	75,000.00	73,698.44	Apr. & Oct.		200.01	1,125.00	924.99
Carried forward	$3,681,000.00	$3,405,061.67		$28,182.91	$192,493.01	$24,946.64	$189,256.74

[1] Denotes sale during year 1922-23. [2] Denotes purchase during year 1922-23.

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Brought forward	$3,681,000.00	$3,405,061.67		$28,182.91	$192,493.01	$24,946.64	$189,256.74
Illinois Steel Company 4½% Debenture Bonds. Due April 1, 1940	100,000.00	92,916.44	Apr. & Oct.	1,125.00	4,500.00	1,125.00	4,500.00
Indiana Power Company non-callable First Lien and General Mortgage 7½% Gold Bonds Series "A." Due November 1, 1941	25,000.00	25,000.00	May & Nov.	312.50	1,875.00	312.50	1,875.00
Indiana Steel Company First Mortgage 5% Gold Bonds. Due May 1, 1952[1]			May & Nov.	833.33	4,450.69		3,617.36
Kansas City Power & Light Company First Mortgage 5% Bonds. Due September 1, 1952[2]	75,000.00	69,879.23	Mar. & Sept.		1,513.89	1,250.00	2,763.89
Lake Shore & Michigan Southern R. R. Company 4% Debenture Bonds. Due May 1, 1931	80,000.00	72,937.65	May & Nov.	533.33	3,200.00	533.33	3,200.00
Lake Shore & Michigan Southern R. R. Company First Mortgage 3½% Bonds. Due June 1, 1997[1]			June & Dec.	145.83	520.14		374.31
Liggett & Myers Tobacco Company 7% Debenture Bonds. Due October 1, 1944	50,000.00	56,961.92	Apr. & Oct.	875.00	3,500.00	875.00	3,500.00
P. Lorillard Company 7% Debenture Bonds. Due October 1, 1944	100,000.00	113,992.90	Apr. & Oct.	1,750.00	7,000.00	1,750.00	7,000.00
Louisville Gas & Electric Company, First and Refunding Mortgage 5% Bonds. Due November 1, 1952[2]	25,000.00	22,849.16	May & Nov.		413.20	208.33	621.53
Louisville & Nashville Unified 4% Bonds. Due July 1, 1940[1]			Jan. & July		1,666.66		1,666.66
Louisville & Nashville (Atlanta, Knoxville & Cincinnati Division) 4% Bonds. Due May 1, 1955[2]	50,000.00	41,544.27	May & Nov.		*55.56*	333.33	277.77
Maine Central Equipment Trust 5½% Bonds. Due October 1, 1927[2]	25,000.00	25,094.72	Apr. & Oct.		*183.32*	343.75	160.43
Manitoba, Province of, 5½% Bonds. Due March 1, 1942	75,000.00	77,160.70	Mar. & Sept.	1,375.00	4,125.00	1,375.00	4,125.00
Memphis Power & Light Company First & Refunding Mortgage 5% Bonds. Due January 1, 1948[2]	100,000.00	86,427.80	Jan. & July		711.80		711.80
Milwaukee Electric Railway & Light Company 5% Bonds. Due December 1, 1951[2]	50,000.00	44,060.77	June & Dec.		2,027.80	208.33	2,236.13
Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. First Consolidated Mortgage 4% Bonds. Due July 1, 1938[2]	100,000.00	89,184.77	Jan. & July		3,744.45		3,744.45
Missouri Pacific R. R. Co. First & Refunding Mortgage Series "D" 6% Bonds. Due February 1, 1949	50,000.00	49,402.88	Feb. & Aug.	1,250.00	3,000.00	1,250.00	3,000.00
Montreal, City of (Maisonneuve), 5½% Bonds. Due May 1, 1930[2]	10,000.00	9,981.25	May & Nov.		*51.94*	91.67	39.73
Carried forward	$4,596,000.00	$4,282,456.13		$36,382.90	$234,450.82	$34,602.88	$232,670.80

[1] Denotes sale during year 1922-23. [2] Denotes purchase during year 1922-23.

Brought forward	$4,596,000.00	$4,282,456.13		$36,382.90	$234,450.82	$34,602.88	$232,670.80
Montreal Metropolitan Commission 5% Bonds. Due November 1, 1942[1]	100,000.00	95,283.96	May & Nov.		861.12	833.33	1,694.45
Montreal Tramways First & Refunding Mortgage 5% Bonds. Due July 1, 1941	50,000.00	43,895.66	Jan. & July		2,500.00		2,500.00
Montreal, Quebec, Roman Catholic School District 5% Bonds. Due February 1, 1947[1]	65,000.00	62,402.68	Feb. & Aug.		*315.97*	1,354.16	1,038.19
National Tube Company First Mtge. 5% Gold Bonds. Due May 1, 1952	100,000.00	99,516.76	May & Nov.	33.33	5,000.00	833.33	5,000.00
New Orleans & Northeastern R. R. Co. Refunding & Imp. Mtge. 4½% Bonds. Due January 1, 1952	100,000.00	84,028.88	Jan. & July		4,500.00		4,500.00
New York Central R. R. Co. 4% Debenture Bonds. Due May 1, 1934	30,000.00	26,188.60	May & Nov.	200.00	1,200.00	200.00	1,200.00
New York Central R. R. Co. Equipment Trust 5% Bonds. Due June 1, 1936[1]	25,000.00	24,248.55	June & Dec.		878.47	104.16	982.63
New York Central R. R. Co. Equipment Trust 5% Bonds. Due June 1, 1937[1]	25,000.00	24,212.31	June & Dec.		878.47	104.16	982.63
New York Central R. R. Co. 30 year Mortgage 4% Gold Bonds. Due January 1, 1942	25,000.00	22,053.76	Jan. & July		927.78		927.78
New York Central R. R. Co. Consolidated Series "A" 4% Bonds. Due February 1, 1998	75,000.00	55,841.70	Feb. & Aug.	1,250.00	3,000.00	1,250.00	3,000.00
New York, City of, Registered Corporate Stock 3½% Bonds. Due May 1, 1954[2]			May & Nov.	291.66	1,793.75		1,502.09
New York, Chicago & St. Louis First Mortgage 4% Bonds. Due October 1, 1937[1]	80,000.00	72,219.71	Apr. & Oct.		951.11	800.00	1,751.11
New York Edison Company First Lien & Rfdg. Series "A" 6½% Bonds. Due October 1, 1941	165,000.00	171,664.72	Apr. & Oct.	2,681.25	10,725.00	2,681.25	10,725.00
New York State Railways First Consolidated Mortgage 6½% Gold Bonds. Due November 1, 1962[1]	50,000.00	48,763.17	May & Nov.	270.83	2,424.50	541.66	2,695.33
New York Steam Corporation First Mortgage 6% Bonds. Due May 1, 1947[1]	50,000.00	46,963.31	May & Nov.		1,666.66	500.00	2,166.66
New York Telephone Company First & General Mortgage 4½% Bonds. Due November 1, 1939[2]			May & Nov.	375.00	2,337.50		1,962.50
New York Telephone Company Refunding Mortgage 20 year 6% Bonds Series "A." Due October 1, 1941	110,000.00	108,270.44	Apr. & Oct.	1,650.00	6,600.00	1,650.00	6,600.00
Newfoundland, Government of, 5½% Bonds. Due June 1, 1939	80,000.00	79,840.00	Jan. & July		4,400.00		4,400.00
Norfolk and Portsmouth Traction Company First Mortgage 5% Bonds. Due June 1, 1936[1]	90,000.00	82,101.14	June & Dec.		2,025.00	375.00	2,400.00
Carried forward	$5,816,000.00	$5,429,951.48		$43,934.97	$286,804.21	$45,829.93	$288,699.17

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Brought forward	$5,816,000.00	$5,429,951.48		$43,934.97	$286,804.21	$45,829.93	$288,699.17
Norfolk & Western Ry. Co. (Pocahontas Coal & Coke Co. Purchase Money Joint 4% Bonds). Due Dec. 1, 1941	50,000.00	43,656.92	June & Dec.	166.67	2,000.00	166.67	2,000.00
Northern Pacific Railway Co. Refunding & Improvement Mortgage Series "D" 5% Bonds. Due July 1, 2047 [1]	75,000.00	70,880.72	Jan. & July		635.42		635.42
Northern Pacific Railway Co. Refunding & Improvement Mortgage Series "B" 6% Bonds. Due July 1, 2047 [1]	140,000.00	145,819.80	Jan. & July		6,890.00		6,890.00
Northern States Power Company First & Refunding Mortgage 5% Bonds. Due April 1, 1941 [1]	50,000.00	47,320.49	Apr. & Oct.		708.33	625.00	1,333.33
Northwestern Telegraph Company First Mortgage 4½% Bonds. Due January 1, 1934 [1]	25,000.00	23,824.63	Jan. & July		779.25		779.25
Nova Scotia, Province of, Canada, 6% Gold Bonds. Due April 1, 1926	45,000.00	43,489.82	Apr. & Oct.	675.00	2,700.00	675.00	2,700.00
Ohio Power Company First & Refunding Mortgage 7% Bonds. Due January 1, 1951	50,000.00	50,652.85	Jan. & July		3,500.00		3,500.00
Ohio State Telephone Company Consolidated & Refunding Mortgage 5% Bonds. Due July 1, 1944 [1]	10,000.00	9,150.00	Jan. & July		36.11		36.11
Ontario, Province of, Canada, 5½% Bonds. Due January 3, 1937 [1]	25,000.00	25,437.50	Jan. 3 & July 3		*473.61*	1,352.08	878.47
Ontario, Province of, Canada, 6% Bonds. Due September 15, 1943 [1]	40,000.00	42,686.25	Mar. 15 & Sept. 15		1,340.00		1,340.00
Oregon Short Line R. R. Company Refunding 4% Gold Bonds. Due December 1, 1929	95,000.00	92,287.61	June & Dec.	316.67	3,800.00	316.67	3,800.00
Oregon Short Line R. R. Company Consolidated First Mortgage 5% Bonds. Due July 1, 1946	138,000.00	139,400.47	Jan. & July		6,900.00		6,900.00
Oregon R. R. & Navigation Co. Consolidated Mortgage 4% Bonds. Due June 1, 1946	44,000.00	42,232.43	June & Dec.	146.67	1,760.00	146.67	1,760.00
Pacific Fruit Express Equipment 7% Bonds. Due June 1, 1932	50,000.00	50,139.34	June & Dec.	291.67	3,500.00	291.67	3,500.00
Pacific Gas & Electric Company General and Refunding Mortgage 5% Bonds. Due January 1, 1942 [1]	50,000.00	45,843.44	Jan. & July		1,405.14		1,405.14
Pacific Gas & Electric Company First & Refunding Mortgage 5½% Bonds. Due December 1, 1952 [1]	50,000.00	49,134.80	June & Dec.		687.50	229.16	916.66
Pacific Light & Power Company First and Refunding Mortgage 5% Bonds. Due September 1, 1951 [2]			Mar. & Sept.	1,100.00	3,254.17		2,154.17
Pacific Telephone & Telegraph Company Refunding Mortgage Series "A" 5% Bonds. Due May 1, 1952 [1]	160,000.00	150,700.86	May & Nov.	1,166.67	7,579.17	1,333.33	7,745.83
Carried forward	$6,913,000.00	$6,502,609.41		$47,798.32	$333,805.69	$50,966.18	$336,973.55

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Brought forward	$6,913,000.00	$6,502,609.41		$47,798.32	$333,805.69	$50,966.18	$336,973.55
Pennsylvania Company (Guaranteed by the Pennsylvania R. R. Co.) 15–25 year 4% Gold Bonds. Due April 1, 1931	50,000.00	49,726.73	Apr. & Oct.	500.00	2,000.00	500.00	2,000.00
Pennsylvania Power & Light Company First Refunding Mortgage 5% Bonds. Due October 1, 1952[1]	100,000.00	92,183.64	Apr. & Oct.		2,249.31	1,250.00	3,499.31
Pennsylvania Railroad Company 10 year 7% Bonds. Due April 1, 1930	15,000.00	15,168.83	Apr. & Oct.	262.50	1,050.00	262.50	1,050.00
Pennsylvania Railroad Company General Equipment Trust 5% Bonds. Due March 1, 1929[1]	25,000.00	24,819.40	Mar. & Sept.	}	*284.72*	416.66	131.94
Pennsylvania Railroad Company General Equipment Trust 5% Bonds. Due March 1, 1936[1]	25,000.00	24,815.65	Mar. & Sept.	}		416.66	416.66
Pennsylvania Railroad Company 15 year Mortgage 6½% Bonds. Due February 1, 1936[1]	33,000.00	35,536.15	Feb. & Aug.		1,096.33	893.75	1,990.08
Pennsylvania Railroad Company Consolidated Mtge. 4% Bonds. Due May 1, 1948[2]			May & Nov.	1,233.33	3,086.11		1,852.78
Pennsylvania Railroad Company General Mortgage Series "A" 4½% Bonds. Due June 1, 1965	50,000.00	46,844.94	June & Dec.	187.50	2,250.00	187.50	2,250.00
Pennsylvania Railroad Company General Mortgage Series "B" 5% Bonds. Due December 1, 1968[2]			June & Dec.	312.50	3,427.08		3,114.58
Philadelphia Electric Company First and Refunding Mortgage 6% Bonds. Due December 1, 1941	50,000.00	51,770.76	June & Dec.	250.00	3,000.00	250.00	3,000.00
Portland (Oregon) Gas & Coke Company First and Refunding Mortgage 5% Bonds. Due January 1, 1940	50,000.00	46,257.14	Jan. & July		2,500.00		2,500.00
Price Brothers & Company, Ltd. First Mortgage 6% Gold Bonds. Due February 1, 1943[1]	50,000.00	49,014.67	Feb. & Aug.		*358.33*	1,250.00	891.67
Rochester Gas & Electric Company 7% Bonds. Due March 1, 1946	25,000.00	25,317.45	Mar. & Sept.	583.33	1,750.00	583.33	1,750.00
St. Louis, Iron Mt. & Southern (River & Gulf Division) First Mortgage 4% Bonds. Due May 1, 1933[1]	50,000.00	42,684.47	May & Nov.		661.11	333.33	994.44
St. Maurice Power Company, Ltd. First Mortgage 6½% Bonds. Due February 1, 1923[1]	50,000.00	49,505.34	Feb. & Aug.		*315.97*	1,354.16	1,038.19
San Diego Consolidated Gas & Electric Company First Mortgage 5% Bonds. Due March 1, 1939[1]	50,000.00	47,904.75	Mar. & Sept.		1,131.94	833.33	1,965.27
San Joaquin Light & Power Company Unified & Refunding Mortgage 6% Bonds. Due March 1, 1952[1]	50,000.00	49,878.70	Mar. & Sept.		1,616.66	1,000.00	2,616.66
Shawinigan Water & Power Company First Refunding Mortgage 6% Bonds. Due July 1, 1950[1]	75,000.00	76,673.71	Jan. & July		3,665.83		3,665.83
South Pacific Coast Railway First Mortgage 4% Bonds. Due July 1, 1937	75,000.00	68,402.29	Jan. & July		2,265.54		2,265.54
Carried forward	$7,736,000.00	$7,299,114.03		$51,127.48	$364,596.58	$60,497.40	$373,966.50

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Brought forward	$7,736,000.00	$7,299,114.03		$51,127.48	$364,596.58	$60,497.40	$373,966.50
Southern California Edison Company General & Refunding Mortgage 5% Bonds. Due February 1, 1944[1]	25,000.00	22,390.85	Feb. & Aug.		*364.58*	520.83	156.25
Southern California Telephone Company First Refunding Mortgage 5% Bonds. Due May 1, 1947	50,000.00	46,722.92	May & Nov.	416.67	2,500.00	416.67	2,500.00
Southern Public Utilities First and Refunding Mortgage 5% Bonds. Due July 1, 1943	75,000.00	69,529.40	Jan. & July		3,750.00		3,750.00
Southern Railway Consolidated Mortgage 5% Bonds. Due July 1, 1994	30,000.00	27,868.85	Jan. & July		1,500.00		1,500.00
Southern Pacific R. R. Company First Refunding Mortgage 4% Bonds. Due January 1, 1955[2]			Jan. & July		4,275.01		4,275.01
Southern Pacific Company San Francisco Terminal First Mortgage 4% Bonds. Due April 1, 1950	20,000.00	16,285.23	Apr. & Oct.	200.00	800.00	200.00	800.00
Springfield Street Railway Company Refunding & General Mortgage 6% Bonds. Due September 1, 1940[1]	50,000.00	48,088.16	Mar. & Sept.		1,391.66	1,000.00	2,391.66
Tennessee Electric Power Company First and Refunding Mortgage 6% Bonds. Due June 1, 1947[1]	150,000.00	143,484.40	June & Dec.	250.00	7,183.33	750.00	7,683.33
Texas Power & Light Company First Mortgage 5% Bonds. Due June 1, 1937[1]	75,000.00	69,297.67	June & Dec.	208.33	3,378.47	312.50	3,482.64
Toledo Edison Company First Mortgage 7% Bonds. Due September 1, 1941	50,000.00	50,989.92	Mar. & Sept.	1,166.67	3,500.00	1,166.67	3,500.00
Toledo Edison Company First Mortgage 5% Bonds. Due March 1, 1947[1]	25,000.00	22,781.25	Mar. & Sept.		833.33	416.66	1,249.99
Toronto, Canada, City of, 6% Bonds. Due July 1, 1945	250,000.00	247,682.74	Jan. & July		15,000.00		15,000.00
Terminal Railroad Association of St. Louis General Refunding Mortgage 4% Bonds. Due January 1, 1953	50,000.00	40,264.71	Jan. & July		2,000.00		2,000.00
Trinity Building Corporation 5½% Bonds. Due June 1, 1939	100,000.00	99,198.66	June & Dec.	458.33	5,500.00	458.33	5,500.00
Union Oil Company of California 20 year non-callable 6% Gold Bonds. Due May 1, 1942	100,000.00	100,712.19	Feb. & Aug.	1,000.00	4,500.00	2,500.00	6,000.00
Union Pacific R. R. Company First Lien & Refunding Mortgage 4% Bonds. Due June 1, 2008	202,000.00	165,218.09	Mar. & Sept.	3,813.33	10,721.33	2,693.33	9,601.33
Union Pacific R. R. Company First Railroad and Land Grant 4% Bonds. Due July 1, 1947[2]			Jan. & July		205.56		205.56
Union Pacific R. R. Company 7% Bonds. Due June 1, 1931, 1934, and 1935	80,000.00	80,327.76	June & Dec.	466.66	5,600.00	466.66	5,600.00
Carried forward	$9,068,000.00	$8,549,956.83		$59,107.47	$436,870.69	$71,399.05	$449,162.27

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Brought forward	$9,068,000.00	$8,549,956.83		$59,107.47	$436,870.69	$71,399.05	$449,162.27
Union Terminal Company (Dallas, Texas) First Mortgage 5% Bonds. Due April 1, 1942	50,000.00	47,528.77	Apr. & Oct.	625.00	2,500.00	625.00	2,500.00
United Light & Railways Co. First and Refunding Mortgage 5% Bonds. Due June 1, 1932[1]	50,000.00	44,544.94	June & Dec.		486.11	208.33	694.44
United Light & Railways Co. First Lien & Consolidated Mortgage 6% Bonds. Due April 1, 1952	50,000.00	46,763.90	Apr. & Oct.	750.00	3,000.00	750.00	3,000.00
United States Rubber Company 5% Bonds. Due Jan. 1, 1947	50,000.00	44,597.97	Jan. & July		2,500.00		2,500.00
United States Government Second Liberty Loan 4¼% Bonds. Due November 15, 1942	100,000.00	97,457.58	May 15 & Nov. 15	1,062.50	5,241.67	531.25	4,710.42
United States Government Fourth Liberty Loan 4¼% Bonds. Due October 15, 1938[2]			Apr. 15 & Oct. 15	442.70	602.08		159.38
Utah Light & Traction Company First & Refunding Mortgage Series "A" 5% Bonds. Due October 1, 1944	50,000.00	45,582.86	Apr. & Oct.		1,875.00	625.00	2,500.00
Utah Power and Light Company 6% Bonds. Due February 1, 1944	50,000.00	46,989.67	Feb. & Aug.	1,250.00	3,000.00	1,250.00	3,000.00
West Penn Power Company First Mortgage Series "E" 5% Bonds. Due March 1, 1963[1]	25,000.00	21,957.08	Mar. & Sept.		*270.83*	416.66	145.83
Winnipeg, City of, Canada, 6% Bonds. Due Oct. 1, 1946	100,000.00	104,387.97	Apr. & Oct.	1,500.00	6,000.00	1,500.00	6,000.00
Winnipeg Electric Railway Co. First & Refunding Mortgage 5% Bonds. Due January 1, 1935[1]	40,000.00	36,748.41	Jan. & July		1,044.45		1,044.45
Yadkin River Power Company First Mortgage 30 year 5% Bonds. Due April 1, 1941[1]	25,000.00	22,252.00	Apr. & Oct.		208.33	312.50	520.83
	$9,658,000.00	$9,108,767.98		$64,737.67	$463,057.50	$77,617.79	$475,937.62

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Schedule K

INVESTMENTS AND INCOME THEREON

RESERVE FUND NO. 2

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
American Thread Company First Mortgage 6% Bonds. Due December 1, 1928	$10,000.00	$10,061.33	June & Dec.	$50.00	$600.00	$50.00	$600.00
Canada, Dominion of, 5½% Bonds. Due August 1, 1929[1]			Feb. & Aug.	229.17	284.16		54.99
Canada, Dominion of, 5½% Bonds. Due November 1, 1934	20,000.00	19,138.78	May & Nov.	183.33	1,100.00	183.33	1,100.00
Canada, Southern, First & Refunding Consolidated Mortgage Series "A" 5% Bonds. Due October 1, 1962	30,000.00	28,588.96	Apr. & Oct.	350.00	1,500.00	375.00	1,525.00
Commercial Cable Company First Mortgage 4% Bonds. Due January 1, 2397	45,000.00	32,546.50	Jan. & Apr. July & Oct.		1,800.00		1,800.00
Delaware & Hudson Co. 10 year 7% Bonds. Due June 1, 1930[1]			June & Dec.	116.67	1,512.78		1,396.11
Great Northern Railway Company General Mortgage Series "A" 7% Bonds. Due July 1, 1936[2]	200,000.00	211,696.44	Jan. & July		13,815.28		13,815.28
Lehigh Valley R. R. Co. 10 year Collateral Trust 6% Bonds. Due September 1, 1928[1]			Mar. & Sept.	1,000.00	1,258.33		258.33
New York Central R. R. Co. Series "A" Consolidated 4% Bonds. Due February 1, 1998	23,000.00	18,216.38	Feb. & Aug.	383.33	920.00	383.33	920.00
Northern Pacific Railway Company General Lien 3% Bonds. Due January 1, 2047[2]	70,000.00	44,692.69	Feb. & May Aug. & Nov.	125.00	1,561.25	350.00	1,786.25
Northwestern Bell Telephone Co. First Mortgage 7% Bonds. Due February 1, 1941[2]	20,000.00	21,496.32	Feb. & Aug.		350.00	583.33	933.33
Ohio Power Company First & Refunding Mortgage 7% Bonds. Due January 11, 1951[2]	85,000.00	88,647.49	Jan. & July		5,651.53		5,651.53
Oregon & Washington R. R. & Navigation Company First & Refunding 4% Bonds. Due January 1, 1961	50,000.00	39,563.38	Jan. & July		2,000.00		2,000.00
Pennsylvania Power & Light Company First & Refunding Mortgage 7% Bonds. Due February 1, 1951[2]	45,000.00	47,460.40	Feb. & Aug.		146.02	1,312.50	1,458.52
Pennsylvania R. R. Company 10 year 7% Bonds. Due April 1, 1933	85,000.00	85,654.48	Apr. & Oct.	1,487.50	5,950.00	1,487.50	5,950.00
Southern Railway First Consolidated 5% Bonds. Due July 1, 1994	30,000.00	25,596.58	Jan. & July		1,500.00		1,500.00
Toledo Edison Company First Mortgage 7% Bonds. Due September 1, 1941[2]	45,000.00	47,765.73	Mar. & Sept.	700.00	2,708.23	1,050.00	3,058.23
	$758,000.00	$721,125.46		$4,625.00	$42,657.58	$5,774.99	$43,807.57

[1] Denotes sale during year 1922–23. [2] Denotes purchase during year 1922–23.

Schedule L

INVESTMENTS AND INCOME THEREON

EMERGENCY RESERVE FUND

Securities	*Par Value*	*Book Value*	*Interest Dates*	*Accrued Interest June 30, 1922*	*Interest Received*	*Accrued Interest June 30, 1923*	*Income for Year*
Alberta, Province of, Canada, 6% Bonds. Due Dec. 1, 1941[1]	$50,000.00	$52,814.18	June & Dec.		$2,391.67	$250.00	$2,641.67
Canada, Dominion of, 5½% Bonds. Due November 1, 1934	50,000.00	47,849.16	May & Nov.	$458.33	2,750.00	458.33	2,750.00
Canada, Dominion of, 5% Bonds. Due March 1, 1937[2]			Mar. & Sept.	1,250.00	2,572.92		1,322.92
Canada, Dominion of, 30 year Mortgage 5% Bonds. Due May 1, 1952	75,000.00	74,819.63	May & Nov.	625.00	3,750.00	625.00	3,750.00
Chesapeake & Ohio First Consolidated 5% Bonds. Due May 1, 1939	5,000.00	4,960.91	May & Nov.	41.67	250.00	41.67	250.00
Delaware & Hudson Co. 10 year 7% Bonds. Due June 1, 1930[2]	9,000.00	9,000.00	June & Dec.	116.67	1,375.50	52.50	1,311.33
Detroit Edison Company First & Refunding Mortgage Series "A" 5% Bonds. Due July 1, 1940	30,000.00	27,421.27	Mar. & Sept.	500.00	1,500.00	500.00	1,500.00
Lake Shore & Michigan Southern 25 year 4% Debenture Bonds. Due May 1, 1931	50,000.00	43,141.84	May & Nov.	333.33	2,000.00	333.33	2,000.00
Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. Equipment Trust 5% Bonds. Due March 1, 1929[1]	25,000.00	24,701.06	Mar. & Sept.		156.25	416.66	572.91
New York, Chicago & St. Louis R. R. Co. 2d & Improvement Mortgage 6% Bonds. Due May 1, 1931	25,000.00	24,940.23	May & Nov.		395.83	250.00	645.83
New York Edison Co. First Lien & Refunding Mortgage Series "A" 6½% Bonds. Due October 1, 1941	5,000.00	5,201.65	Apr. & Oct.	81.25	325.00	81.25	325.00
Nova Scotia, Province of, Canada, 6% Gold Bonds. Due April 1, 1926	5,000.00	4,837.81	Apr. & Oct.	75.00	300.00	75.00	300.00
Ontario, Province of, Canada, 5½% Bonds. Due January 3, 1937[1]	25,000.00	25,432.69	Jan. 3 & July 3		*473.61*	676.19	202.58
Pacific Telephone & Telegraph Co. Refunding Mtge. Series "A" 5% Bonds. Due May 1, 1952	10,000.00	9,422.76	May & Nov.	83.33	500.00	83.33	500.00
Philadelphia Electric Company First & Refunding Mortgage 5½% Bonds. Due June 1, 1947	15,000.00	14,892.38	June & Dec.	68.75	825.00	68.75	825.00
Toledo Edison Company 7% Bonds. Due Sept. 1, 1941	25,000.00	26,247.50	Mar. & Sept.	583.33	1,750.00	583.33	1,750.00
Tri State Telephone & Telegraph Company First & Refunding Mortgage 5½% Bonds. Due May 1, 1942[1]	10,000.00	10,000.00	May & Nov.		181.81	91.66	273.47
United States Telephone Company First Extended Mortgage 7% Bonds. Due July 1, 1941[1]	15,000.00	15,520.34	Jan. & July		167.22		167.22
	$429,000.00	$421,203.41		$4,216.66	$20,717.59	$4,587.00	$21,087.93

[1] Denotes purchase during year 1922–23. [2] Denotes sale during year 1922–23.

Schedule M

PROFIT OR *LOSS* ON SALE OF SECURITIES

RESERVE FUND NO. 1

Date	*Securities*	*Par Value*	*Book Value*	*Price*	*Amount*	*Profit or Loss*
9/18/22	Atchison, Topeka & Santa Fe Railway Gen'l Mtge. 4% Bonds. Due 1995	$175,000.00	$147,010.05	$93.00	$162,750.00	$15,739.95
8/8/22	Canada, Dominion of, 5½% Bonds. Due 1929	15,000.00	14,651.79	102⅝	15,393.75	741.96
8/16/22	Canada, Dominion of, 5% Bonds. Due 1937	100,000.00	99,125.00	99½	99,500.00	375.00
5/7/23	Canada, Dominion of, 5% Bonds. Due 1937	25,000.00	24,714.52	100½	25,125.00	410.48
5/11/23	Chesapeake & Ohio Consolidated 5% Bonds. Due 1939	50,000.00	49,144.34	100	50,000.00	855.66
9/12/22	Chicago, Burlington & Quincy R.R. Co. (Ill. Div.) First Mtge. 4% Bonds. Due 1949	50,000.00	50,353.98	91⅞	45,937.50	*4,416.48*
9/12/22	Chicago, Burlington & Quincy R.R. Co. (Ill. Div.) 3½% Bonds. Due 1949	50,000.00	38,944.66	85	42,500.00	3,555.34
3/6/23	Chicago, Burlington & Quincy R.R. Co. (Ill. Div.) 3½% Bonds. Due 1949	140,000.00	109,045.06	79⅝	111,475.00	2,429.94
12/8/22	Chicago & Northwestern Railway Co. Gen'l Mtge. 5% Bonds. Due 1987	50,000.00	50,948.01	104	52,000.00	1,051.99
12/18/22	Chicago & Northwestern Railway Co. Gen'l Mtge. 5% Bonds. Due 1987	50,000.00	50,948.00	104½	52,250.00	1,302.00
1/26/23	Chicago & Northwestern Railway Co. Gen'l Mtge. 5% Bonds. Due 1987	50,000.00	50,948.00	104	52,000.00	1,052.00
4/17/23	Commonwealth Edison Co. First Mtge. 5% Bonds. Due 1943	30,000.00	28,385.36	97	29,100.00	714.64
10/11/22	Delaware & Hudson Co. First & Refunding 4% Bonds. Due 1943	100,000.00	87,944.45	90½	90,500.00	2,555.55
3/15/23	General Electric Co. 5% Debenture Bonds. Due 1952	50,000.00	44,844.84	100¾	50,375.00	5,530.16
Various	Indiana Steel Co. First Mtge. 5% Gold Bonds. Due 1952	100,000.00	99,502.09		99,968.75	466.66
9/18/22	Lake Shore & Mich. Southern R.R. Co. First Mtge. 3½% Bonds. Due 1997	50,000.00	36,488.77	81⅛	40,562.50	4,073.73
10/11/22	Louisville & Nashville Unified 4% Bonds. Due 1940	150,000.00	129,977.53	91¾	137,625.00	7,647.47
5/10/23	New York, City of, Registered Corporate Stock 3½% Bonds. Due 1954	50,000.00	46,448.52	88½	44,250.00	*2,198.52*
5/15/23	New York Telephone Co. First & Gen'l Mtge. 4½% Bonds. Due 1939	50,000.00	46,118.55	92⅞	46,437.50	318.95
Various	Pacific Light & Power First & Refunding Mtge. Due 1951	66,000.00	60,964.08		65,020.00	4,055.92
Various	Pennsylvania R.R. Co. Consol. Mtge. 4% Bonds. Due 1948	185,000.00	171,596.63		169,550.00	*2,046.63*
4/30/23	Pennsylvania R.R. Co. Gen'l Mtge. 5% Bonds. Due 1968	75,000.00	73,993.12	99½	74,625.00	631.88
1/26/23	South Pacific Coast Railway First Mtge. 4% Bonds. Due 1937	3,000.00	2,730.00	92½	2,775.00	45.00
3/14–21/23	Southern Pacific R. R. Co. First & Rfdg. Mtge. 4% Bonds. Due 1955	150,000.00	122,170.24		125,625.00	3,454.76
12/14/22	Union Pacific R.R. Co. First Lien & Rfdg. Mtge. 4% Bonds. Due 2008	84,000.00	68,523.84	86¼	72,450.00	3,926.16
Various	Union Pacific R. R. Co. First Railroad & Land Grant 4% Bonds. Due 1947	20,000.00	17,646.76		18,835.00	1,188.24
8/8/22	United States Government Second Liberty Loan 4¼% Bonds. Due 1942	100,000.00	97,326.35	100½	100,500.00	3,173.65
7/27/22	United States Government Fourth Liberty Loan 4¼% Bonds. Due 1938	50,000.00	47,410.39	100.60	50,800.00	3,389.61
	Total Reserve Fund No. 1	$2,068,000.00	$1,867,904.93		$1,927,930.00	$60,025.07

RESERVE FUND NO. 2

Date	*Securities*	*Par Value*	*Book Value*	*Price*	*Amount*	*Profit or Loss*
8/8/22	Canada, Dominion of, 5½% Bonds. Due 1929	$10,000.00	$9,765.12	102\frac{5}{8}$	$10,262.50	$497.38
6/30/23	Delaware & Hudson Co. 7% Bonds. Due 1930	20,000.00	20,000.00	108	21,600.00	1,600.00
8/2/22	Lehigh Valley R.R. Co. 10 year Collateral Trust 6% Bonds. Due 1928	50,000.00	49,215.63	103	51,500.00	2,284.37
	Total Reserve Fund No. 2	$80,000.00	$78,980.75		$83,362.50	$4,381.75

EMERGENCY RESERVE FUND

Various	Canada, Dominion of, 5% Bonds. Due 1937	$75,000.00	$74,257.28		$74,750.00	$492.72
Various	Delaware & Hudson Co. 7% Bonds. Due 1930	11,000.00	11,000.00		11,885.50	885.50
	Total Emergency Reserve Fund	$86,000.00	$85,257.28		$86,635.50	$1,378.22
	Total	$2,234,000.00	$2,032,142.96		$2,097,928.00	$65,785.04

The treasurer has submitted from time to time to the executive committee statements of receipts and expenditures, which were printed and sent to all trustees. These statements, together with the report of the auditing firm just quoted, give a complete account of the financial operations of the Foundation for the period covered by this report.

ROBERT A. FRANKS, *Treasurer*

INDEX

INDEX

Abuse of Intercollegiate Athletics, 33 ff.
  Elimination of, 37.
  Expenditure, 35.
  Faculty control, 35.
  Football coaches, 35.
  Locations of institutions replying to questionnaire, 34.
  Miscellaneous abuses, 37.
  "Ringers," 36.
  Salaries of coaches, 35.
  "Scouting," 36.
  Special students, 36.
    Courses of, 36.
Acadia University, and Teachers Insurance and Annuity Association, 26.
Activities of the Foundation, 19 ff.
Actuaries of Carnegie Foundation, 32.
Adams, Thomas Sewall, elected policy-holders' trustee of Teachers Insurance and Annuity Association, 22.
Adelphi College, and Teachers Insurance and Annuity Association, 26.
Admission to the bar, rules for, 46 ff.
Alabama, University of, and Teachers Insurance and Annuity Association, 26.
Alfred University, and Teachers Insurance and Annuity Association, 26.
Allegheny College, total cost of allowances in, insert between 12 and 13.
Allen, Edward Archibald, deceased, 115.
Allen, Mrs., pension granted, 8.
Allowances, retiring, of the Foundation, total cost of, table showing, insert between 12 and 13.
  Expenditure, total, in, 13.
  Financial data concerning, 10.
  Geographical distribution of, 15.
  Granted, 1923, 7 f.
  In institutions not associated, 9.
  In institutions recently associated, 9.
  Load assumed of, total, 14.
  Now in force, 11.
  Problem of, 19.
Alma College, and Teachers Insurance and Annuity Association, 26.
Alumni, influence of, upon colleges, 38 f.
American Association of Dental Schools, 65 f.
American Association of University Professors, 20.
American Bar Association, 46.
  Resolutions of, concerning legal education, 47, 52, 55.
American Council on Education, 20.
American Institute of Dental Teachers, 65.
American Law, restatement of, 62 f.
American Law Institute, 20, 62.
American Museum of Natural History, and employees' pensions, 108 ff.
American School of Classical Studies at Athens, and Teachers Insurance and Annuity Association, 26.
American School of Oriental Research, and Teachers Insurance and Annuity Association, 26.
Amherst College, total cost of allowances in, insert between 12 and 13.
Anderegg, Frederick, deceased, 115.
Anderegg, Mrs., pension granted, 8.
Annual Reports, of the Carnegie Foundation:
  Sixteenth, 99.
  Seventeenth, 71, 73 f.
Annuitants' Tables, American, 32, 33.
  McClintock's Male, 32, 33.
Antioch College, and Teachers Insurance and Annuity Association, 26.
Arkansas, University of, and Teachers Insurance and Annuity Association, 22, 26, 27 f.
Art in the school curriculum, 76, 82.
Arts, household, in the school curriculum, 76, 88, 89 f.
Associated Institutions, list not increased, 1923, 6.
Association of American Colleges, 20.
Association of American Law Schools, 52.
Association of American Universities, 20.
Association of Colleges and Secondary Schools of the Southern States, 34.
Athens, 77.
  School of philosophers at, 80.
Athletics, college, 84, 85.
  Intercollegiate, 6.
    Abuse of, 33 ff.
Aydelotte, Frank, trustee, iii.

Babson, Herman, retired, 8.
Bar Admission Rules, 46 ff.
  Diploma privilege, 48 ff.
  Duration and location of law study, 47 f.
  General education, 46 f.
  In the several states, 49 ff.
  Summary of, 51.
Bates College, and Teachers Insurance and Annuity Association, 26.
  Total cost of allowances in, insert between 12 and 13.
Beatty, John Wesley, retired, 7.
Beloit College, total cost of allowances in, insert between 12 and 13.
Bemis Brothers Bag Company, and Conant on industrial pensions, 111.

Bennett, Malvina, retired, 7.
Bentley, Luette, deceased, 115 f.
Berea College, and Teachers Insurance and Annuity Association, 26.
Bethlehem Company, and industrial pensions, 110.
Birmingham-Southern College, and Teachers Insurance and Annuity Association, 21, 22, 26.
Blau, Max Friedrich, retired, 8.
Boone, Richard Gause, deceased, 116.
Boone, Mrs., pension granted, 8.
Botany in schools, 87.
Both-Hendriksen, Louise, deceased, 116.
Bowdoin College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Brackett, James Raymond, deceased, 117.
Brackett, Mrs., pension granted, 9.
Breckenridge, Lester Paige, retired, 7.
Brigham Young University, and Teachers Insurance and Annuity Association, 22, 26.
Brown, Henry William, deceased, 22.
Brown University, and Teachers Insurance and Annuity Association, 26.
Bryan, William Lowe, trustee, iii.
Bryn Mawr College, and Teachers Insurance and Annuity Association, 26.
Bulletins of the Foundation, 20.
Number Nine, 112.
Number Thirteen, 43.
Number Sixteen, 6.
On legal education, etc., 43.
Bureau of the Census, United States, 43, 44.
Burrison, Henry Kingsbury, deceased, 117.
Bursum, Senator Holm O., and pensions, 107.
Burton, Marion LeRoy, trustee, iii.
Business of the year, 17 ff.
Butler, Nicholas Murray, trustee, iii.

Caldwell, John Williamson, deceased, 117.
Caldwell, Mrs., pension granted, 8.
California Commissioner of Public Instruction, 96, 99, 100.
California Institute of Technology, and Teachers Insurance and Annuity Association, 26.
California State Teachers Association and pensions, 99.
California, University of, total cost of allowances in, insert between 12 and 13.
Canada, Teachers Insurance and Annuity Association and teachers in, 3.
Canadian Dental Faculties Association, 65.
Carleton College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Carnegie, Andrew, endowments of, and Teachers Insurance and Annuity Association, 22.
Carnegie Corporation of New York, 3, 23.
Carnegie Institute of Pittsburgh, total cost of allowances in, insert between 12 and 13.
Carnegie Institute of Technology, and Teachers Insurance and Annuity Association, 22, 26.
Carnegie Institution of Washington, total cost of allowances in, insert between 12 and 13.
Carnegie, Thomas Morrison, trustee, iii.
Carruthers, Adam, retired, 7.
Case School of Applied Science, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Census Bureau, United States, 43.
Central University of Kentucky, total cost of allowances in, insert between 12 and 13.
Centre College, and Teachers Insurance and Annuity Association, 26.
Charleston, College of, and Teachers Insurance and Annuity Association, 22, 26.
Chattanooga College of Law, 53.
Cheek, Samuel Robertson, deceased, 118.
Chemistry, in trade schools, 87.
Chicago, University of, and Teachers Insurance and Annuity Association, 26.
Chittenden, Russell Henry, retired, 7.
Church, Christian, 80.
Cincinnati, University of, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Citadel, The, and Teachers Insurance and Annuity Association, 22, 26.
Clark, John Bates, retired, 7.
Clark University, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Clarkson School of Technology, total cost of allowances in, insert between 12 and 13.
Clement, 80.
Coe College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Colby College, 22.
College Entrance Examination Board, 6, 20.
College of Pharmacy, Columbia University, and Teachers Insurance and Annuity Association, 26.
College teachers, life expectation of, 32 f.
Colleges, 7 f., 26 ff.
Influence of alumni upon their, 38 f.
In relation to schools, 84 f.
Participating in Teachers Insurance and Annuity Association, 26 f.
Number of, 21.

Colorado College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Columbia University, 22.
Including College of Pharmacy and Teachers College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Commercial subjects, in schools, 83.
Common Law and the Case Method in American University Law Schools (Bulletin Eight), 43.
Commonwealth Edison Company, and industrial pensions, 110.
Comprehensive Plan of Insurance and Annuities for College Teachers (Bulletin Nine), 112.
Conant, Jr., Luther, *Critical Analysis of Industrial Pension Systems*, 111.
Consolidated Balance Sheet, 132.
Continuation schools, 87 f.
Control of athletics, faculty, 35.
Converse College, and Teachers Insurance and Annuity Association, 26.
Cooking, instruction in, in schools, 89 f.
Cornell College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Cornell University, total cost of allowances in, insert between 12 and 13.
Cost of education, rising, 71 ff.
Costs, net, under policies of Teachers Insurance and Annuity Association, 24 ff.
Cox, John, deceased, 118.
Crafts, skilled, and education, 85 ff.
Critical Analysis of Industrial Pension Systems, by Luther Conant, Jr., 111.
Curriculum, school, 75 ff., 81 ff., 91.
Cultural subjects in, 81 ff.
Cushing, Eleanor Philbrook, retired, 7.

Dalhousie College, total cost of allowances in, insert between 12 and 13.
Dartmouth College, total cost of allowances in, insert between 12 and 13.
Deceased recipients of retiring allowances, 1922–23, 115 ff.
Democracy and education, 81 ff., 90 f.
In earlier education, 78 f.
In seventeenth and eighteenth century education, 79.
De Mortuis, 115 ff.
Denny, George Hutcheson, trustee, iii.
Denio, Elizabeth Harriet, deceased, 118 f.
Dental Educational Council of America, 65, 66.
Dental education in Canada and the United States, study of, 3, 5, 6, 63 ff.
Health service, 67.
Improvements in, 65.
Independent dental schools, 64 f.
Medicine and dentistry, 66 f.
Organizations connected with, 65 f.
Proprietary dental schools, 64.
Dental Educational Council of America, 65.
Dental Faculties Association of American Universities, 65.
Dental schools in Canada and the United States, 63 ff.
Denver, University of, and Teachers Insurance and Annuity Association, 22, 26.
Dickinson College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Dinwiddie, Albert Bledsoe, trustee, iii.
Diploma privilege in legal education, 48 ff.
Disability, pensioners of Carnegie Foundation, and mortality, 33.
Hunter's Disability Tables, 33.
Studies concerning, 23.
Total permanent, and contracts of Teachers Insurance and Annuity Association, 23.
Discipline, in schools, 81, 82, 84.
Dividends paid by Teachers Insurance and Annuity Association on insurance policies, 22.
Division of Educational Enquiry, 4, 20, 41 ff., 134, 140.
And Dental education, 63 ff.
Intercollegiate athletics, 33.
Legal education, 43 ff.
Balance sheet, 134.
Expenditures, 5.
Dow, Mrs. Eleanor Pearson, pension granted, 8.
Drake University, total cost of allowances in, insert between 12 and 13.
Drawing, in the school curriculum, 76, 77.
Droppers, Garrett, retired, 7.
Drury College, total cost of allowances in, insert between 12 and 13.
Dubuque, University of, and Teachers Insurance and Annuity Association, 26.
Duluth, and teachers' pensions, 105.

Economic *Problems of Democracy*, quoted, 74 f.
Education, What is, 73 ff.
Elmira College, and Teachers Insurance and Annuity Association, 26.
Emergency Reserve Fund, 4, 151.
Balance sheet, 137.
Emerson, Charles Franklin, deceased, 119.
Emerson, Mrs., pension granted, 8.
Emerson, Samuel Franklin, retired, 7.
Endowment of Carnegie Foundation, 4, 5.
Engineering, status of teachers of, 5.
English, in school curricula, 77, 87, 89.
Ernst, Harold Clarence, deceased, 119.

Ernst, Mrs., pension granted, 8.
European schools, 82 ff.
Examinations, written, bibliography and synopsis of literature concerning, 6.
Executive Committee, Carnegie Foundation, Members of, iii.
Proceedings of, 6.
Expectation, life, of college teachers, 32 f.
Expenditure, 4, 5.
Statement of income and, 138.

Faculty control of athletics, 35.
Falconer, Robert, trustee, iii.
Fathers of the Church, 80.
Federal pensions, 107 ff.
Fernow, Bernhard Eduard, deceased, 120.
Fernow, Mrs., pension granted, 8.
Ferry, Frederick Carlos, trustee, iii.
Fisk University, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Flexner, Abraham, 33.
Flint, Albert Stowell, deceased, 120.
Flint, Mrs., pension granted, 8.
Flint, Helen Currier, retired, 7.
Foreign languages in Roman schools, 78.
Franklin College of Indiana, total cost of allowances in, insert between 12 and 13.
Franks, Robert A., elected member executive committee, 5.
Treasurer, 154.
Trustee, iii.
Fukien Christian University, and Teachers Insurance and Annuity Association, 26.
Furst, Clyde, Secretary, Carnegie Foundation, iii.

Gayley, Charles Mills, retired, 7.
General Fund, balance sheet, 133.
George Peabody College, and Teachers Insurance and Annuity Association, 26.
Goodale, George Lincoln, deceased, 121.
Goodale, Mrs., pension granted, 8.
Goucher College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Government, study of, in the school curriculum, 77, 87.
Grammar, in Roman schools, 78.
Grammarians, Greek, 77.
Greece, schools of, 77 f.
Greek, 78.
Grinnell College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Gutsell, Hiram Samuel, retired, 7.
Gymnastics, teachers of, in ancient Greek schools, 77.

Hadley, Arthur Twining, quoted, 74 f.
Hamilton College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Harding, President, on a national budget, 72, 95.
Quoted on, 107 f.
Harvard University, total cost of allowances in, insert between 12 and 13.
Law school, 53.
Health service, 67.
Hibben, John Grier, trustee, iii.
High school, function of, 83 f.
Higher Education in the Maritime Provinces of Canada (Bulletin Sixteen), 6.
Hill, Albert Ross, trustee, iii.
Hobart College, total cost of allowances in, insert between 12 and 13.
Holway, Ruliff Stephen, retired, 7.
Household arts in the school curriculum, 76, 88, 89 f.
Housman, Ida E., 99.
Houston, Texas, Y. M. C. A. School of Law, 53.
How to Organize the Curriculum, quoted, 75 f., 88.
Howe, Mrs. Fannie Gay, pension granted, 8.
Humphreys, Alexander Crombie, trustee, iii.
Hygiene, in the schools, 89.

Illinois State Teachers Association, sixty-eighth annual meeting of, 95 f.
Illinois Teachers Pension and Retirement Fund, secretary of, 95 f., 97, 99.
Immigration and education, 85 ff.
Income, 4.
And expenditures, statement of, 138.
From investments, 139 ff.
Independent dental schools, 64 f.
Indiana, teachers' pensions in, 95.
University, total cost of allowances in, insert between 12 and 13.
Industrial arts, in the school curriculum, 76.
Influence of alumni upon their colleges, 38 f.
Athletics and, 39.
College trustees from alumni, 38, 39.
Insurance contracts of Teachers Insurance and Annuity Association in force, 1919–23, 21.
Laws, New York State, and, 3.
Intercollegiate athletics, 6.
Abuse of, 33 ff.
Study of, 5, 6.
Interest paid by Teachers Insurance and Annuity Association on annuity contracts, 22.
Investments and income therefrom, 139 ff.

Jefferson School of Law, 53.
Jerome, Saint, 80.
Jesus, 78, 80.
John B. Stetson University, College of Law, 53.
Johns Hopkins University, total cost of allowances in, insert between 12 and 13.
Jones, John Carleton, retired, 7.
Jones, William Carey, retired, 7.
Journalism, teaching of, 6.
Justice and the Poor (Bulletin Thirteen), 43.
Justinian, 80.

Kansas, and admission to the bar, 46 f.
Teachers' pensions in, 95, 101, 106.
Kendrick, Mrs. Georgia, deceased, 121.
Keppel, Frederick Paul, president of Carnegie Corporation, 3.
Keysor, William, deceased, 121.
Keysor, Mrs., pension granted, 8.
King, Henry Churchill, trustee, iii.
Kingsbury, Joseph Thomas, retired, 9.
Kirkland, James Hampton, chairman, trustees, Carnegie Foundation, iii.
Elected chairman, trustees, 5.
Knox College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.

Labor unions and education, 85 ff.
Lamont, Thomas William, trustee, iii.
Lang, Henry Roseman, retired, 7.
Langton, Hugh Hornby, retired, 8.
Languages, foreign, in Roman schools, 78.
Latin, in legal education, 47.
Law schools, 52 ff.
Attendance at, 54.
Listed by states, 55 ff.
Study, duration, and location of, 47 f.
Lawrence College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Learned, William S., assistant to president, Carnegie Corporation, 1921–23, 3.
Legal education, 43 ff.
Bar Admission Rules, 46 ff.
Comparative Professional Statistics, 43 ff.
Law Schools, 52 ff.
Restatement of American Law, 62 f.
Study of, 3, 5, 6, 43 ff.
Lehigh University, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Leonard, Mrs. Bertha Hopkins, pension granted, 8.
Levi, Moritz, retired, 7.
Lewis, Mrs. Grace Robbins, pension granted, 8.
Libby, William, retired, 7.
Life expectation of college teachers, 32 f.
Life Insurance Courant, quoted, on Teachers Insurance and Annuity Association, 23 f.
Lindsay, Mrs. Laura, pension granted, 8.
Lindsay, Samuel McCune, elected policy-holders' trustee of Teachers Insurance and Annuity Association, 1921, 22.
Logan, Garrett, retired, 7.
Lombard, Warren Plimpton, retired, 7.
Louisiana and legal education, 47.
Lowell, Abbott Lawrence, trustee, iii.
Luxuries and education, 72 f.

McAlester, Andrew Walker, deceased, 122.
McAlester, Mrs., pension granted, 8.
McBride, James McLaren, deceased, 122.
McCaleb, Ella, retired, 7.
McClintock's Male Annuitants' Tables, 32, 33.
McCormick, Samuel Black, retired, 7.
McCorvey, Thomas Chalmers, retired, 9.
McGill University, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
McMahon, Mrs. Katherine Crane, pension granted, 8.
McMurry, Charles A., 76.
Quoted, 75 f., 88.
Mackenzie, Mrs. Agnes Kathleen, pension granted, 8.
Maine, and teachers' pensions, 97, 101 f.
Marietta College, and Teachers Insurance and Annuity Association, 26.
Total cost of allowances in, insert between 12 and 13.
Marine Trust Company of Buffalo, and industrial pensions, 110.
Maritime Provinces, study of education in the, expenditure for, 5.
Marx, Charles David, retired, 7.
Massachusetts Institute of Technology, total cost of allowances in, insert between 12 and 13.
Mathematics, elementary, in the school curriculum, 77, 87.
In ancient Greece, 77.
Continuation schools, 87.
Roman schools, 78.
Mavor, James, retired, 7.
Medical education, study of, 33.
Medical sects, 6.
Medicine in dentistry, 66 f.
Mediterranean countries, 78.
Merchants' Association of New York, report on industrial pensions, 111.
Michigan, University of, and Teachers Insurance and Annuity Association, 26.

Total cost of allowances in, insert between 12 and 13.
Middlebury College, total cost of allowances in, insert between 12 and 13.
Milford, Mrs. Harriet Chase, pension granted, 8.
Minneapolis, and teachers' pensions, 104 f.
Minnesota, and teachers' pensions, 102 ff.
State Teachers' Insurance and Retirement Fund, Board of, 103.
University of, total cost of allowances in, insert between 12 and 13.
Missouri, University of, total cost of allowances in, insert between 12 and 13.
Montana and legal education, 47.
Montreal University, Dental School, 65.
Moore, John Leverett, retired, 8.
Morley, Edward Williams, deceased, 122 f.
Morrow, Cornelius Wortendyke, deceased, 123.
Mortality, among pensioners of Carnegie Foundation, 32, 33.
Mount Holyoke College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Mueller, Margarethe, retired, 8.
Murray, Walter C., elected vice-chairman, trustees, 5.
Trustee, and vice-chairman, iii.
Music, in the school curriculum, 76, 82, 88 f.
In ancient Greek education, 77.

National Association of Dental Faculties, 65.
National Education Association, Committee on Salaries, Tenure, and Pensions, 97 f.
Resolutions on pensions, 97.
National Personnel Association, report on industrial pensions, 111.
Neilson, William Allan, trustee, iii.
Newcombe, Frederick Charles, retired, 7.
New Hampshire, teachers' pensions in, 95, 102.
New Jersey, and law study, 47.
Teachers' Pension and Annuity Law, 97, 99.
New York City, teachers' pensions in, 96 f., 98.
New York State, Commission on Pensions, 99.
Insurance Department, 32.
New York University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Nicea, Council of, 91.
Ninth Bulletin, Carnegie Foundation, 112.
Northwestern University, law course, 53.
Norton, Frederick Owen, retired, 8.

Oberlin College, and Teachers Insurance and Annuity Association, 26, 27, 28 f.
Total cost of allowances in, insert between 12 and 13.
Occidental College, and Teachers Insurance and Annuity Association, 27.
Officers of Administration and Trustees, Carnegie Foundation, iii.
Officers of the Foundation, activities of, 20.
Ohio, and legal education, 47.
And teachers' pensions, 97.
Ohio Wesleyan University, and Teachers Insurance and Annuity Association, 27.
Organization in the schools, 79, 80 f., 83, 91.
Origen, 80.
Osborne, James Harvey, retired, 7.

Packer Collegiate Institute, and Teachers Insurance and Annuity Association, 27.
Palestine, 78.
Patten, Simon Nelson, deceased, 123 f.
Patterson, James Kennedy, deceased, 124.
Pay of teachers, 74.
In Roman schools, 78.
Peking Union Medical College, and Teachers Insurance and Annuity Association, 26, 27.
Pennsylvania, and legal education, 47.
University of, and Teachers Insurance and Annuity Association, 27.
Law course, 53.
Total cost of allowances in, insert between 12 and 13.
Pension amendments, 98 ff.
Pension Systems and pension legislation, 93 ff.
American Museum of Natural History, 108 ff.
Federal pensions, 107 f.
Bursum, Senator Holm O., and, 107.
Civil Service Retirement Act of 1902, 107.
Civil War and, 107 f.
Cleveland, President, and, 108.
Harding, President, quoted on, 107 f.
Mexican War and, 107 f.
United States Civil Service Commission, 107.
War of 1812 and, 107 f.
World War and, 107 f.
Industrial pensions, 110 ff.
Bemis Brothers Bag Company, 111.
Bethlehem Company and, 110.
Commonwealth Edison Company and, 110.
Conant, Jr., Luther, on, 111.
Marine Trust Company of Buffalo and, 110.
Merchants' Association of New York report on, 111.
National Personnel Association report on, 111.
Pension Amendments, 98 ff.
California, 99 ff.
Kansas, 101.
Maine, 101 f.
Minneapolis, 104 f.
Minnesota, 102 f.

Philippine Islands, 105 f.
St. Paul, 104 f.
Washington, State of, 95, 106 f.
Pension theory, 95 ff., 99 f.
Solvency, 99 f.
Teachers Pensions, 95 ff., 110.
California Commissioner of Public Instruction, on, 96, 100.
Harding, President, 95.
Illinois State Teachers' Association, sixty-eighth meeting, 95 f.
Illinois Teachers' Pension and Retirement Fund, secretary of, 95 f., 97.
In California, 95, 99 ff.
Duluth, 105.
Housman, Ida E., on, 99.
Illinois, 95 f., 97.
Indiana, 95.
Kansas, 95, 101, 106.
Maine, 97, 101 f.
Minneapolis, 104 f.
Minnesota, 102 ff.
New Hampshire, 95, 102.
New Jersey, 97, 99.
New York City, 96 f., 98.
New York State, 97, 98.
Commission on Pensions, 99.
Ohio, 97.
Philippine Islands, 105 f.
Rhode Island, 95, 102.
St. Paul, 104 f.
Vermont, 97.
Washington, State of, 95, 106 f.
Wisconsin, 105.
National Education Association, 97.
Committee on Salaries, Tenure, and Pensions, 97.
Resolutions of, 97 f.
Pension Amendments, 98 ff.
Recent developments in, 95 ff.
Reserve plan for, 96 f.
Richardson, Governor F. W., of California, and, 95, 99, 100.
Roberts, W. M., on, 95 f.
Standard plan for, 96 f.
Pensions, Carnegie, 9 ff., 19.
Pensions, study of, by Carnegie Foundation, 20.
Pharmacy, 6.
Pharmacy, College of, Columbia University, and Teachers Insurance and Annuity Association, 26.
Philippine Islands, and teachers' pensions, 105 f.
Philo of Alexandria, 80.
Philosophers, Greek and Roman, 80.
Physics, in continuation schools, 87.
Pittsburgh, University of, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Piutti, Anna Adams, retired, 7.
Plantz, Samuel, elected secretary, trustees, 5.
Secretary, trustees, Carnegie Foundation, iii.
Policy-holders' Participation in Teachers Insurance and Annuity Association, 22.
Polytechnic Institute of Brooklyn, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
President, Carnegie Foundation, Report of, 1 ff.
Princeton University, and Teachers Insurance and Annuity Association, 27, 28 ff.
Total cost of allowances in, insert between 12 and 13.
Pritchett, Henry Smith, President, Carnegie Foundation, iii, 112.
Trustee, member of executive committee, iii.
Professional statistics, comparative, 43 ff.
Profit from sales of securities, cash, 4.
Proprietary dental schools, 64.
Purdue University, total cost of allowances in, insert between 12 and 13.
Putzker, Albin, deceased, 124.

Quality versus quantity in education, 81 ff.
Queen's University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.

Radcliffe College, total cost of allowances in, insert between 12 and 13.
Rating of dental schools, 66.
Receipts of Carnegie Foundation, total, 4.
Reed, Alfred Z., 63.
Relation of public school to the trades and crafts, 85 ff.
Rensselaer Polytechnic Institute, total cost of allowances in, insert between 12 and 13.
Reserve Fund Number One, 4, 5, 19, 131.
Balance sheet, 135.
Reserve Fund Number Two, 4, 5, 131.
Balance sheet, 136.
Reserve plan of teachers' pensions, 96 f.
Reserves, Carnegie Foundation, 4.
Restatement of American Law, 62 f.
Retiring allowances and pensions, Carnegie Foundation, 5, 7, 9, 19, insert between 12 and 13.
Retirement, rules of, to be administered strictly, 6.
Reynolds, Horatio McLeod, retired, 7.
Rhees, Rush, elected trustee, 5.
Trustee, iii.
Rhetoric, in Roman schools, 78.
Rhode Island, and law schools, 48.
And teachers' pensions, 95, 102.

Richardson, Governor F. W., of California, 95, 99, 100.
Richmond School of Law, 53.
Ripon College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Rising cost of education, 71 ff.
"Rising Cost of Education," in Seventeenth Annual Report of the Carnegie Foundation, 71, 74.
Roberts, W. M., 95 f.
Rochester, University of, 5.
And Teachers Insurance and Annuity Association, 27.
Dental school, 65.
Total cost of allowances in, insert between 12 and 13.
Rockefeller, John D., endowments of, and Teachers Insurance and Annuity Association, 22.
Rollins College, and Teachers Insurance and Annuity Association, 27.
Rose Polytechnic Institute, and Teachers Insurance and Annuity Association, 27.
Roth, Filibert, retired, 7.
Rule Six, 5.
Rules of retirement, administration of, 6.

St. Paul, Minnesota, and teachers' pensions, 104 f.
St. Thomas, College of, 53.
Sanderson, Robert Louis, deceased, 125.
Sanderson, Mrs., pension granted, 8.
School and Society, 99, note 1.
Schools, as an agency of civilization, 77 ff.
Continuation, 87 f.
Dental, 63 ff.
Development of the, 80 f.
European, 82 ff.
Jewish, in the time of Jesus, 78.
Law, 52 ff.
Medieval, 78.
Modern, 90 f.
Organization in present day, 79, 80 f., 83, 91.
Roman, 78.
Seventeenth and eighteenth century, 79.
Schuchert, Charles, retired, 7.
Sects, medical, 6.
Sifting of the present-day curriculum, 88 ff.
Sixteenth Annual Report, Carnegie Foundation, on California teachers' pensions, 99.
Sloan, Benjamin, deceased, 125.
Smith, Alexander, deceased, 125 f.
Smith, Elias Hershey, retired, 7.
Smith, Herbert Stearns Squier, retired, 7.
Smith, Mrs. Sarah Bowles, pension granted, 8.
Smith College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Socrates, 77.
South Carolina, Military College of, and Teachers Insurance and Annuity Association, 22.
University of, and Teachers Insurance and Annuity Association, 27.
Winthrop College, and Teachers Insurance and Annuity Association, 27.
Southern Association of Colleges and Preparatory Schools, 6.
Spencer, Herbert, 77.
Stanford University, and Teachers Insurance and Annuity Association, 27.
State-supported institutions, and Teachers Insurance and Annuity Association, 22.
Stenography, in schools, 83 f.
Sterrett, James McBride, deceased, 126.
Stetson University (Florida), law course, 53.
Stevens Institute of Technology, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Suzzallo, Henry, trustee, iii.
Swarthmore College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.

Taxation, and education, 71 ff.
Teacher's Responsibility for our Educational Integrity, 69 ff.
Relation of the public schools to the trades and crafts, 85 ff.
Rising cost of education, 71 ff.
School as an agency of civilization, 77 ff.
Sifting of the present-day curriculum, 88 ff.
Teacher's responsibility to civilization, 90 f.
Unseen transformation of human institutions, 79 ff.
What is education? 73 ff.
Teacher's responsibility to civilization, 90 f.
Teachers, college, life expectation of, 32 ff.
Pay of, 74.
In Roman schools, 84.
Teachers College, Columbia University, and Teachers Insurance and Annuity Association, 26.
Teachers Insurance and Annuity Association, 3, 4, 19, 21 ff., 112.
Annuity contracts in force, 1919–23, 21.
Arkansas, University of, and, 22, 26.
Assets of, 4.
Birmingham-Southern College and, 21 f., 26.
Brigham Young University and, 22.
Carnegie Institute of Technology and, 22, 26.
Changes in contracts of, 22 f.
Citadel, The, and, 22, 26.
College of Charleston and, 22, 26.

Colleges participating in, list of, 26 f.
Number of, 21.
Denver, University of, and, 22, 26.
Disability and, 23.
Dividends paid by, on insurance policies, 22.
Insurance contracts in force, 1919–23, number of, 21.
Interest paid by, on annuity contracts, 22.
Life Insurance Courant, on, 23 f.
Net costs under policies of, 24 ff.
Oberlin College, and, 22, 26.
Policy-holders' participation in, 22.
Progress of, 21 ff.
Rockefeller Endowments and, 22.
South Carolina, Military College of, and, 22.
State-supported institutions and, 22.
Total permanent disability clause in contracts of, 23.
Universities and colleges participating in, list of, 26 f.
Number of, 21.
Utah, University of, and, 22, 26.
Teachers, pay of, 74.
Thaxter, Roland, retired, 7.
Theology, origin of, 80.
Thwing, Charles Franklin, resigned as trustee, 5.
Toronto, University of, total cost of allowances in, insert betwen 12 and 13.
Trades, skilled, and education, 85 ff.
Training for the Public Profession of the Law (Bulletin Fifteen), 43.
Quoted, 62 f.
Treasurer, report of the, 129 ff.
Consolidated balance sheet, 132.
Division of Educational Enquiry, 134, 140.
Emergency Reserve Fund, 151.
Balance sheet, 137.
General Fund, 133.
Investments and income therefrom, 139 ff.
Profit or loss, 152 ff.
Reserve Fund Number One, 141 ff.
Balance sheet, 135.
Reserve Fund Number Two, 131.
Balance sheet, 136.
Statement of income and expenditures, 138.
Trinity College, total cost of allowances in, insert between 12 and 13.
Trowbridge, John, deceased, 126.
Trustees, Carnegie Foundation, iii.
Meeting of, 5.
Tufts College, total cost of allowances in, insert between 12 and 13.
Tulane University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Typewriting, in the school curriculum, 83, 86.
Union College, and Teachers Insurance and Annuity Association, 26.
Union University, total cost of allowances in, insert between 12 and 13.
Unions, labor, and education, 85 ff.
United States Government, and pensions, 107 f.
Universities and colleges participating in Teachers Insurance and Annuity Association, list of, 26 f.
Number of, 21.
Unseen transformation of human institutions, 79 ff.
Utah, University of, and Teachers Insurance and Annuity Association, 22, 26, 27.

Van Name, Addison, deceased, 127.
Vanderbilt University, and Teachers Insurance and Annuity Association, 27.
Vanderlip, Frank Arthur, elected member, executive committee, 5.
Trustee, iii.
Vassar College, total cost of allowances in, insert between 12 and 13.
Vermont, and teachers' pensions, 97.
University of, total cost of allowances in, insert between 12 and 13.
Vinson, Robert Ernest, trustee, iii.
Virginia Union University, law course, 53.
Virginia, University of, total cost of allowances in, insert between 12 and 13.
Vocational education in the public schools, 83 ff., 86 f.

Wabash College, total cost of allowances in, insert between 12 and 13.
Waddell, Benjamin Harrison, retired, 9.
Walker, Helen Adelaide, retired, 9.
Ware, Edward Twichell, retired, 9.
Washburn College law school, 46 f.
Washington and Jefferson University, total cost of allowances in, insert between 12 and 13.
Washington and Lee University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Washington Conference on Legal Education, 46, 47, 48.
Washington, State of, and teachers' pensions, 95, 106 f.
Washington University, total cost of allowances in, insert between 12 and 13.
Webster School of Law, 53.
Wellesley College, total cost of allowances in, insert between 12 and 13.
Wells College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Wells, Horace Lemuel, retired, 7.

Welsh, Lilian, retired, 9.
Wesleyan University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Western Reserve University, total cost of allowances in, insert between 12 and 13.
What is education? 73 ff.
Whitman College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Widows' pensions, 9, 10.
Williams College, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Willson, Robert Wheeler, deceased, 127.
Willson, Mrs., pension granted, 8.
Winthrop College, and Teachers Insurance and Annuity Association, 27.
Wisconsin, and teachers' pensions, 105.
University of, total cost of allowances in, insert between 12 and 13.
Wolff, John Eliot, retired, 7.
Woodruff, Mrs. Ellen Eliza, pension granted, 8.
Woodward, William, retired, 8.
Worcester Polytechnic Institute, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Written examinations, bibliography and synopsis of literature concerning, 6.

Yale University, and Teachers Insurance and Annuity Association, 27.
Total cost of allowances in, insert between 12 and 13.
Y. M. C. A. School of Law, Houston, Texas, 53.