

THE NATIONAL ARCHIVES
COLLECTIONS



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

*Edw
C-1*

**THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT OF TEACHING**

**SEVENTH ANNUAL REPORT
OF THE
PRESIDENT AND OF THE TREASURER**

576 FIFTH AVENUE
NEW YORK CITY
October, 1912

*131995-
2015/14*

THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT OF TEACHING



SEVENTH ANNUAL REPORT
OF THE
PRESIDENT AND OF THE TRUSTEES

LB
2334
C3
11/24/12

D. B. UPDIKE, THE MERRYMOUNT PRESS, BOSTON

OFFICERS OF ADMINISTRATION AND TRUSTEES

HENRY SMITH PRITCHETT	<i>President</i>
ROBERT A. FRANKS	<i>Treasurer</i>
CLYDE FURST	<i>Secretary</i>

TRUSTEES

WILLIAM PETERSON	<i>Chairman</i>
DAVID STARR JORDAN	<i>Vice-Chairman</i>
CHARLES FRANKLIN THWING	<i>Secretary of the Board</i>
HILL McCLELLAND BELL	ABBOTT LAWRENCE LOWELL
WILLIAM LOWE BRYAN	THOMAS McCLELLAND
NICHOLAS MURRAY BUTLER	SAMUEL BLACK McCORMICK
THOMAS MORRISON CARNEGIE	SAMUEL PLANTZ
EDWIN BOONE CRAIGHEAD	HENRY SMITH PRITCHETT
WILLIAM HENRY CRAWFORD	IRA REMSEN
GEORGE HUTCHESON DENNY	JACOB GOULD SCHURMAN
ROBERT A. FRANKS	WILLIAM FREDERICK SLOCUM
ARTHUR TWINING HADLEY	JAMES MONROE TAYLOR
ALEXANDER CROMBIE HUMPHREYS	FRANK ARTHUR VANDERLIP
HENRY CHURCHILL KING	CHARLES RICHARD VAN HISE

EXECUTIVE COMMITTEE

HENRY SMITH PRITCHETT, <i>ex officio</i>	
NICHOLAS MURRAY BUTLER	ALEXANDER CROMBIE HUMPHREYS
ROBERT A. FRANKS	JACOB GOULD SCHURMAN
ARTHUR TWINING HADLEY	FRANK ARTHUR VANDERLIP

N

CONTENTS

REPORT OF THE PRESIDENT

PART I THE BUSINESS OF THE YEAR

	PAGE
Endowment and Income	3
The Annual Meeting of the Trustees	4
The Executive Committee	5
List of Accepted Institutions	6
Allowances granted during the Year	8
Summary of Pensions granted since the Beginning of the Foundation	11
The Exchange of Teachers between Prussia and the United States	16
The Publications of the Foundation	19
Pension Systems	23
College Pensions	24
Pensions for Public School Teachers : State Systems: Virginia, Maryland, Rhode Island, Wisconsin, New Jersey, New York	26
Proposed State Systems: Maine, Wyoming, California, District of Columbia, Massachusetts, Georgia, Indiana, Michigan, Pennsylvania, New Hampshire	33
Local Systems: Kansas, Kentucky, Minnesota, Utah, Ohio, Illinois	36
Municipal Systems: Chicago, New York City, Boston, Philadelphia, Detroit, San Francisco	37
Industrial Pensions	44
Civil Service Pensions in New South Wales	48
The Civil Service Pension Act of South Africa	58
Contributory and Non-Contributory Pensions	59
Subsistence and Stipendiary Pensions	63
A Feasible Pension System for a College	65
A Feasible Pension System for Public Schools	70
The Pension System of the Carnegie Foundation	78
Six Years of Administrative Experience	81
Six Years of Financial Experience	85
The Educational Function of the Foundation	94

PART II CURRENT EDUCATIONAL PROBLEMS

College Entrance Requirements	101
Admission to Advanced Standing	109
Medical Progress	122
University and College Financial Reporting	130
Advertising as a Factor in Education	133
Education and Politics	143
Sham Universities	154

PART III

De Mortuis	165
REPORT OF THE TREASURER	175
INDEX	183

REPORT OF THE PRESIDENT

PART I

THE BUSINESS OF THE YEAR

REPORT OF THE PRESIDENT

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

I HAVE the honor to present, in accordance with the by-laws, the Seventh Annual Report of the Carnegie Foundation for the Advancement of Teaching, for the fiscal year ending September 30, 1912. By the kindness of the executive committee I have been permitted a leave of absence from December, 1911, to October, 1912. In consequence the work of the Foundation has been restricted more closely to its immediate problems. The present report is therefore devoted chiefly to these matters.

ENDOWMENT AND INCOME

THE endowment of the Foundation has been increased during the fiscal year by two million dollars. Mr. Carnegie transferred one million dollars to the trustees in December, 1911, and in May, 1912, he transferred a similar amount. Including the transfer of one million dollars in March, 1911, Mr. Carnegie has thus given to the Foundation three of the five million dollars offered in his letter of March 31, 1908, in addition to his original gift of ten million dollars on April 16, 1905.

The trustees, therefore, hold in trust at present about fourteen million dollars, the thirteen millions given by Mr. Carnegie being in the fifty year five per cent bonds of the United States Steel Corporation, the remaining nine hundred thousand dollars, the result of accumulation from income since the establishment of the Foundation, being invested in other securities, purchased upon the recommendation of the finance committee. The funds and the form of their investment are given in detail in the Report of the Treasurer.

During the fiscal year ended on September 30, 1912, the trustees were in receipt of an income of \$676,486.56. They authorized a total expenditure of \$634,496.89. This expenditure was distributed as follows:

Retiring Allowances and Pensions in Accepted Institutions		
Officers and Teachers	\$388,338.27	
Widows	<u>53,646.37</u>	\$441,984.64
Retiring Allowances and Pensions granted to Individuals		
Officers and Teachers	111,462.55	
Widows	<u>16,975.84</u>	128,438.39
Expenses of Administration		36,949.31
Educational Investigation and Publication		<u>27,124.55</u>

THE ANNUAL MEETING OF THE TRUSTEES

THE sixth annual meeting of the trustees was held on November 15, 1911, at the offices of the Foundation, the chairman of the board, Principal William Peterson of McGill University, presiding, and all of the trustees being present.

The trustees reelected to the executive committee for the statutory term of three years the members whose terms expired at this meeting, President Hadley of Yale University and President Schurman of Cornell University.

On the recommendation of the executive committee, the trustees repealed their resolution of 1910, which authorized the committee to grant, in their discretion, retiring allowances on the basis of twenty-five years of service which included noteworthy presidential or other administrative work in a college or university.

At the meeting of the trustees on November 17, 1909, when retiring allowances on the basis of twenty-five years of service were restricted to cases of disability, the trustees instructed the executive committee to safeguard the interests of those whose twenty-five years of service included service as a college president. The executive committee granted no allowances under these instructions, and at their meeting on November 16, 1910, the trustees, at the suggestion of the committee, amended the resolution so as to instruct the committee to safeguard the interests of presidents or other administrators who had served education in a noteworthy and unusual way. The committee found this also unsatisfactory, and, without having granted any allowances under either form of the resolution, recommended its entire withdrawal. This action was taken on November 15, 1911, the trustees at the same time approving the reasons for the committee's recommendation, — that it was unwise in general to make any exceptions to the rules, and unwise in particular to distinguish between executives and other professors. Thus, this resolution, adopted in 1909 and amended in 1910, was rescinded in 1911, without any allowances having been granted under it at any time.

The retiring allowances now granted by the Foundation in institutions upon the accepted list are therefore based upon four simple rules, three of which cover cases for which the grant is practically automatic. Thus, briefly, the executive committee is empowered to grant a retiring allowance to:

First. Any person in an institution upon the accepted list who is sixty-five years of age, and who has served not less than fifteen years as a professor, or not less than twenty-five years as an instructor or as professor and instructor.

Second. Any person in an institution upon the accepted list who has served twenty-five years as a professor, or thirty years as instructor or as professor and instructor, and who is shown by a medical examination to be entirely unfitted by disability for continuing the work of a teacher.

Third. A widow who has for ten years been the wife of any teacher in an institution upon the accepted list who was in receipt of or was entitled to a retiring allowance according to the regulations given above.

Fourth. The executive committee has the authority, if in its judgment it appears advisable, to grant retiring allowances to professors who have research in view, and have shown themselves unmistakably fit to pursue it. No retiring allowance has yet been granted under this permission. Such allowances, in any case, will be an extremely rare recognition by the trustees of original ability of the highest order, with the expectation of unusual achievement to follow.

With regard to individual allowances outside of the accepted list, the executive committee resolved on May 5, 1910, that it was inexpedient to grant such allowances in the future.

THE EXECUTIVE COMMITTEE

FOUR meetings of the executive committee were held during the fiscal year: on October 19 and November 15, 1911, and on May 9 and June 27, 1912. At the meetings in May and June, which I was unable to attend, President Butler of Columbia University acted as chairman. Printed minutes of these meetings of the committee, with a detailed statement of the current receipts and expenditures of the Foundation, were mailed to the trustees after each meeting. A list of the retiring allowances and pensions voted by the committee during the fiscal year is given later, on pages 8 and 9 of this report.

The committee added no institutions to the accepted list during the year, resolving that all applications of institutions to be placed upon this list should await the receipt of a report concerning the present and prospective financial obligations of the Foundation, based upon the actuarial study now in progress. A list of the seventy-two universities, colleges, and schools of technology now on the accepted list is given on pages 6 and 7 of this report. The committee was compelled, according to the limitations of the charter of the Foundation, to decline the request of several bureaus of the federal government that professors who go from the service of a college to scientific service under the government should remain eligible for a retiring allowance for a limited number of years.

The committee decided that the physical director of a college does not come within the retiring allowance system unless he is a regular member of the faculty, and a teacher of hygiene. It was decided also that the position of secretary to the president of a university or college does not give the holder the status of an administrative officer within the meaning of the rules of the Foundation.

LIST OF ACCEPTED INSTITUTIONS

AMHERST COLLEGE Amherst, Massachusetts	FRANKLIN COLLEGE OF INDIANA Franklin
BATES COLLEGE Lewiston, Maine	GRINNELL COLLEGE Grinnell, Iowa
BELOIT COLLEGE Beloit, Wisconsin	HAMILTON COLLEGE Clinton, New York
BOWDOIN COLLEGE Brunswick, Maine	HARVARD UNIVERSITY Cambridge, Massachusetts
UNIVERSITY OF CALIFORNIA Berkeley	HOBART COLLEGE Geneva, New York
CARLETON COLLEGE Northfield, Minnesota	INDIANA UNIVERSITY Bloomington
CASE SCHOOL OF APPLIED SCIENCE Cleveland, Ohio	JOHNS HOPKINS UNIVERSITY Baltimore, Maryland
CENTRAL UNIVERSITY OF KENTUCKY Danville	KNOX COLLEGE Galesburg, Illinois
UNIVERSITY OF CINCINNATI Cincinnati, Ohio	LAWRENCE COLLEGE Appleton, Wisconsin
CLARK UNIVERSITY Worcester, Massachusetts	LEHIGH UNIVERSITY South Bethlehem, Pennsylvania
THOMAS S. CLARKSON MEMORIAL SCHOOL OF TECHNOLOGY Potsdam, New York	LELAND STANFORD JUNIOR UNIVERSITY Stanford University, California
COE COLLEGE Cedar Rapids, Iowa	MCGILL UNIVERSITY Montreal, Quebec
COLORADO COLLEGE Colorado Springs	MARIETTA COLLEGE Marietta, Ohio
COLUMBIA UNIVERSITY New York City	MASSACHUSETTS INSTITUTE OF TECHNOLOGY Boston
CORNELL UNIVERSITY Ithaca, New York	UNIVERSITY OF MICHIGAN Ann Arbor
DALHOUSIE COLLEGE AND UNIVERSITY Halifax, Nova Scotia	MIDDLEBURY COLLEGE Middlebury, Vermont
DARTMOUTH COLLEGE Hanover, New Hampshire	UNIVERSITY OF MINNESOTA Minneapolis
DICKINSON COLLEGE Carlisle, Pennsylvania	UNIVERSITY OF MISSOURI Columbia
DRAKE UNIVERSITY Des Moines, Iowa	MOUNT HOLYOKE COLLEGE South Hadley, Massachusetts
DRURY COLLEGE Springfield, Missouri	NEW YORK UNIVERSITY New York City
	OBERLIN COLLEGE Oberlin, Ohio

ACCEPTED INSTITUTIONS

7

- UNIVERSITY OF PENNSYLVANIA
Philadelphia
- UNIVERSITY OF PITTSBURGH
Pittsburgh, Pennsylvania
- POLYTECHNIC INSTITUTE OF BROOKLYN
Brooklyn, New York
- PRINCETON UNIVERSITY
Princeton, New Jersey
- PURDUE UNIVERSITY
Lafayette, Indiana
- RADCLIFFE COLLEGE
Cambridge, Massachusetts
- RIPON COLLEGE
Ripon, Wisconsin
- UNIVERSITY OF ROCHESTER
Rochester, New York
- ROSE POLYTECHNIC INSTITUTE
Terre Haute, Indiana
- SMITH COLLEGE
Northampton, Massachusetts
- STEVENS INSTITUTE OF TECHNOLOGY
Hoboken, New Jersey
- SWARTHMORE COLLEGE
Swarthmore, Pennsylvania
- UNIVERSITY OF TORONTO
Toronto, Ontario
- TRINITY COLLEGE
Hartford, Connecticut
- TUFTS COLLEGE
Tufts College, Massachusetts
- TULANE UNIVERSITY OF LOUISIANA
New Orleans
- UNION UNIVERSITY
Scheneectady, New York
- VASSAR COLLEGE
Poughkeepsie, New York
- UNIVERSITY OF VERMONT
Burlington
- UNIVERSITY OF VIRGINIA
Charlottesville
- WABASH COLLEGE
Crawfordsville, Indiana
- WASHINGTON AND JEFFERSON COLLEGE
Washington, Pennsylvania
- WASHINGTON UNIVERSITY
St. Louis, Missouri
- WELLESLEY COLLEGE
Wellesley, Massachusetts
- WELLS COLLEGE
Aurora, New York
- WESLEYAN UNIVERSITY
Middletown, Connecticut
- WESTERN RESERVE UNIVERSITY
Cleveland, Ohio
- WILLIAMS COLLEGE
Williamstown, Massachusetts
- UNIVERSITY OF WISCONSIN
Madison
- WORCESTER POLYTECHNIC INSTITUTE
Worcester, Massachusetts
- YALE UNIVERSITY
New Haven, Connecticut

ALLOWANCES VOTED DURING THE YEAR

1. IN ACCEPTED INSTITUTIONS

RETIRING ALLOWANCES

<i>Institution</i>	<i>Name</i>	<i>Academic Title</i>	<i>Date Effective</i>
AMHERST COLLEGE.....	WILLIAM ISAAC FLETCHER, M.A.....	Librarian.....	Nov. 1, 1911
COLUMBIA UNIVERSITY.....	JOHN WILLIAM BURGESS, PH.D., LL.D., JUR.D.	Ruggles Professor of Political Science and Constitutional Law..	July 1, 1912
CORNELL UNIVERSITY.....	HENRY SHALER WILLIAMS, PH.D.	Professor of Geology.....	June 15, 1912
DARTMOUTH COLLEGE.....	FRANK ASBURY SHERMAN, M.S.....	Professor of Mathematics on the Chandler Foundation.....	Nov. 1, 1911
	THOMAS WILSON DOBB WORTHEN, A.M.....	Cheney Professor of Mathematics	Nov. 1, 1911
FRANKLIN COLLEGE.....	COLUMBUS H. HALL, A.M., D.D.	Professor of Greek.....	July 1, 1912
GRINNELL COLLEGE.....	JESSE MACY, LL.D.....	Professor of Political Economy...	July 1, 1912
HARVARD UNIVERSITY.....	CHARLES LORING JACKSON, A.M.....	Professor of Chemistry.....	Sept. 1, 1912
	SILAS MARCUS MACVANE, PH.D.....	McLean Professor of Ancient and Modern History.....	Nov. 1, 1911
	ARTHUR SEARLE, A.M.....	Professor of Astronomy.....	Sept. 1, 1912
JOHNS HOPKINS UNIVERSITY.....	EDWARD RENOUF, PH.D.....	Collegiate Professor of Chemistry	Nov. 1, 1911
KNOX COLLEGE.....	THOMAS RIGNEY WILLARD, A.M., B.D.....	Dean and Professor of German...	June 14, 1912
MASSACHUSETTS INSTITUTE OF TECHNOLOGY.....	FRANCIS WARD CHANDLER.....	Professor of Architecture.....	Nov. 1, 1911
	PETER SCHWAMB.....	Professor of Machine Design and Director of the Mechanical Laboratories.....	Oct. 1, 1911
UNIVERSITY OF MICHIGAN.....	OTIS COE JOHNSON, PH.G., A.M.*....	Professor of Qualitative Analysis	Nov. 1, 1911
	MARTIN L. D'OOGHE, PH.D., LL.D., LITT.D.....	Professor of Greek.....	Oct. 1, 1912
UNIVERSITY OF MINNESOTA.....	HENRY TURNER EDDY, C.E., PH.D., LL.D.....	Professor of Mathematics and Dean of Graduate School.....	Aug. 1, 1912
	ARTHUR E. HAYNES, M.S., M.PH., SC.D.....	Professor of Mathematics.....	June 1, 1912
MOUNT HOLYOKE COLLEGE.....	ADAM C. HICKMAN, LL.D.	Professor of Law.....	June 15, 1912
	LOUISE FITZ RANDOLPH, M.A.....	Professor of Archaeology and History of Art.....	June 12, 1912
OBERLIN COLLEGE.....	FRANK FANNING JEWETT, A.M.	Professor of Chemistry and Mineralogy.....	Sept. 1, 1912
UNIVERSITY OF PENNSYLVANIA.....	CHARLES L. DOOLITTLE, C.E., SC.D.....	Professor of Astronomy.....	Sept. 1, 1912
	MORTON W. EASTON, M.D., PH.D.....	Professor of Comparative Philology.....	Sept. 1, 1912
	JOHN WOODBRIDGE PATTON, A.M.....	Professor of Law.....	Sept. 1, 1912
UNIVERSITY OF PITTSBURGH.....	MARSHAM EDWARD WADSWORTH, A.M., PH.D.....	Dean of the School of Mines.....	July 1, 1912
SMITH COLLEGE.....	HENRY M. TYLER, D.D.....	Professor of Greek.....	June 18, 1912
VASSAR COLLEGE.....	MARY W. WHITNEY, A.M.....	Professor of Astronomy.....	Sept. 1, 1912
UNIVERSITY OF VIRGINIA.....	MILTON WYLIE HUMPHREYS, M.A., PH.D., LL.D.....	Professor of Greek.....	Sept. 15, 1912
	ISAAC KIMBER MORAN.....	Bursar.....	Oct. 1, 1912
	ORMOND STONE, M.A.....	Professor of Astronomy.....	Sept. 15, 1912
WASHINGTON UNIVERSITY.....	MARSHALL SOLOMON SNOW, A.M., LL.D.....	Professor of History and Dean of the College.....	July 1, 1912
YALE UNIVERSITY.....	FRANKLIN BOWDITCH DEXTER, LITT.D.....	Assistant Librarian.....	July 1, 1912

* Died June 6, 1912.

WIDOWS' PENSIONS

<i>Institution</i>	<i>Name</i>	<i>Husband's Title</i>	<i>Date Effective</i>
CORNELL UNIVERSITY.....	MRS. GEORGE WILLIAM JONES.....	Professor of Mathematics.....	Dec. 1, 1911
HARVARD UNIVERSITY.....	MRS. HENRY PICKERING BOWDITCH	Dean of Medical Faculty and Professor of Physiology.....	June 1, 1912
	MRS. THOMAS DWIGHT.....	Professor of Anatomy.....	Dec. 1, 1911
INDIANA UNIVERSITY.....	MRS. HAROLD W. JOHNSTON.....	Professor of Latin.....	June 18, 1912
MCGILL UNIVERSITY.....	MRS. HENRY TAYLOR BOVEY.....	Professor of Civil Engineering and Applied Mechanics, and Dean of the Faculty of Applied Science	Feb. 3, 1912
UNIVERSITY OF MICHIGAN.....	MRS. OTIS COE JOHNSON.....	Professor of Qualitative Analysis	July 7, 1912
UNIVERSITY OF MINNESOTA.....	MRS. WILLIAM S. PATTEE.....	Professor of Law and Dean of College of Law.....	Dec. 1, 1911
UNIVERSITY OF PENNSYLVANIA.....	MRS. HENRY W. SPANGLER.....	Professor of Dynamical Engineering.....	April 1, 1912
PRINCETON UNIVERSITY.....	MRS. HENRY NEVIUS VAN DYKE.....	Registrar.....	Jan. 24, 1912
STEVENS INSTITUTE OF TECHNOLOGY.	MRS. JOHN BURKITT WEBB.....	Professor of Mathematics and Mechanics.....	Mar. 18, 1912
YALE UNIVERSITY.....	MRS. EDWARD LEWIS CURTIS.....	Holmes Professor of the Hebrew Language and Literature, and Acting Dean.....	Nov. 1, 1911

2. NOT IN ACCEPTED INSTITUTIONS

RETIRING ALLOWANCES

<i>Institution</i>	<i>Name</i>	<i>Academic Title</i>	<i>Date Effective</i>
UNIVERSITY OF ILLINOIS, Urbana....	THOMAS J. BURRILL, PH.D., LL.D.....	Vice-President and Professor of Botany.....	Sept. 1, 1912
	S. W. SHATTUCK, C.E., LL.D.....	Professor of Mathematics and Comptroller.....	Sept. 1, 1912

WIDOWS' PENSIONS

<i>Institution</i>	<i>Name</i>	<i>Husband's Title</i>	<i>Date Effective</i>
ATLANTA UNIVERSITY, Atlanta, Georgia.....	MRS. THOMAS N. CHASE.....	Professor of Latin.....	May 24, 1912
MARION MILITARY INSTITUTE, Marion, Alabama.....	MRS. JAMES T. MURFEE.....	Superintendent.....	May 24, 1912
UNIVERSITY OF NASHVILLE, Nashville, Tennessee.....	MRS. JAMES D. PORTER.....	Chancellor.....	June 19, 1912

FINANCIAL DATA CONCERNING ALLOWANCES GRANTED DURING THE FISCAL YEAR

OCTOBER 1, 1911, TO SEPTEMBER 30, 1912

GRANTEES	Number of Allowances Granted		Average Age at Date of Retirement		Average Length of Service		Number of deaths during the year	Average Amount of Allowance		TOTAL GRANT FOR THE YEAR
	On basis of age	On basis of permanent disability	On basis of age	On basis of permanent disability	Retired on basis of age	On basis of permanent disability		On basis of age	On basis of permanent disability	
PROFESSORS AND OFFICERS IN ACCEPTED INSTITUTIONS	29	3	68.2	58.7	33.5	31.7	9	\$2,006.38	\$1,458.33	\$62,560
PROFESSORS NOT IN ACCEPTED INSTITUTIONS	2		72		45.5		7	\$2,800.00		\$5,600
WIDOWS OF PROFESSORS AND OFFICERS IN ACCEPTED INSTITUTIONS							2	\$973.18		\$10,705
WIDOWS OF PROFESSORS NOT IN ACCEPTED INSTITUTIONS.....							2	\$1,000.00		\$8,000
TOTAL.....	31	3					20	GENERAL AVERAGE OF RETIRING ALLOWANCES \$2,000.00		\$81,865

ALLOWANCES NOW IN FORCE

FINANCIAL SUMMARY ON SEPTEMBER 30, 1912

GRANTEES	Number of Allowances in Force				Average Age at Date of Retirement				Average Length of Service				Average Amount of Allowance				TOTAL GRANT IN FORCE SEPT. 30, 1912	
	On basis of age	On basis of service	On basis of permanent disability	Temporary grants	Total	Retired on basis of age	On basis of service	On basis of permanent disability	In receipt of temporary grants	Retired on basis of age	On basis of service	On basis of permanent disability	In receipt of temporary grants	On basis of age	On basis of service	On basis of permanent disability		Temporary grants
PROFESSORS AND OFFICERS IN ACCEPTED INSTITUTIONS...	154	70	11	1	236	69.3	63.6	56	53	81.8	84.5	27.4	30	\$1787.85	\$1858.50	\$1242.73	\$1500.00	\$420,595
PROFESSORS AND OFFICERS NOT IN ACCEPTED INSTITUTIONS	44	31	4		79	69.7	65.7	61.3		30.6	36.2	33.3		\$1282.95	\$1505.98	\$1105.00		\$107,555
WIDOWS OF PROFESSORS AND OFFICERS IN ACCEPTED INSTITUTIONS					61										\$1184.21			\$67,845
WIDOWS OF PROFESSORS AND OFFICERS NOT IN ACCEPTED INSTITUTIONS					22										\$611.82			\$17,860
TOTAL	198	101	15	1	398													\$608,855
															GENERAL AVERAGE OF RETIRING ALLOWANCES.....			\$1676.66

TOTAL NUMBER OF ALLOWANCES GRANTED

YEAR	INSTITUTIONS	Age	Service	Permanent Disability	Temporary Grants	Widows	Total	Deduct		Net Increase	Allowances and Pensions in Force at End of Year
								For Deaths	For Discontinuances		
1906 ¹	Accepted Institutions	21	18		7	5	51			51	
	Unaccepted Institutions	18	15		4	3	40	1		39	90
1906-7	Accepted Institutions	24	14		2	7	47	9		38	
	Unaccepted Institutions	8	16		3	1	28	8		20	58
1907-8	Accepted Institutions	18	18		4	9	49	8	1	40	
	Unaccepted Institutions	11	9		4	6	30	5	1	24	64
1908-9	Accepted Institutions	29	25		8	13	75	5		70	
	Unaccepted Institutions	18	15		4	3	40	2	1	37	107
1909-10	Accepted Institutions	26	7		4	7	46	11	11	24	
	Unaccepted Institutions	10			1	5	18	12	3	8	27
1910-11	Accepted Institutions	21			6	13	41	15		26	
	Unaccepted Institutions		1		1	4	6	2	3	1	27
1911-12	Accepted Institutions	29			3	11	43	11	2	30	
	Unaccepted Institutions	2				3	5	9	1	5 ³	25
Totals		235	138	12	45	90	519	98	23	398	

¹ July 1 to September 30. ³ Decrease.

GEOGRAPHICAL DISTRIBUTION OF ALLOWANCES GRANTED

STATE, TERRITORY, OR PROVINCE	Number of Allowances granted			Deaths	Temporary Allowances Discon- tinued	Number of Allow- ances in Force
	In Accepted Institutions	In Unaccepted Institutions	Total			
NORTH ATLANTIC DIVISION						
MAINE	7	3	10	1	1	8
NEW HAMPSHIRE	7		7		1	8
VERMONT	3		3			3
MASSACHUSETTS	65	3	68	12	3	53
RHODE ISLAND		1	1			1
CONNECTICUT	26	3	29	5		24
NEW YORK	68	8	76	16	4	58
NEW JERSEY	18		18	5		13
PENNSYLVANIA	24	9	33	6	1	26
<i>Total</i>	245					
SOUTH ATLANTIC DIVISION						
MARYLAND	5		5			5
DISTRICT OF COLUMBIA.....	2	5	7	2		5
VIRGINIA	7	11	18	5		13
WEST VIRGINIA		4	4			4
NORTH CAROLINA		6	6	3		3
SOUTH CAROLINA		7	7	3		4
GEORGIA		4	4	2		2
FLORIDA		3	3			3
<i>Total</i>	54					
SOUTH CENTRAL DIVISION						
KENTUCKY	4	4	8	2		8
TENNESSEE		8	8	2		6
ALABAMA		5	5	1		4
MISSISSIPPI		2	2			2
LOUISIANA	10		10	2	1	7
<i>Total</i>	33					
NORTH CENTRAL DIVISION						
OHIO	15	15	30	4	2	24
INDIANA	9	5	14	1		13
ILLINOIS	3	6	9	1	2	6
MICHIGAN	10	4	14	2		12
WISCONSIN	13		13	4		9
MINNESOTA	16	1	17	2		15
IOWA	7	14	21	3	4	14
MISSOURI	11	4	15	3		12
NORTH DAKOTA		3	3	2		1
NEBRASKA		1	1			1
KANSAS		3	3		1	2
<i>Total</i>	140					
WESTERN DIVISION						
MONTANA		2	2	1		1
COLORADO.....	2	4	6		2	4
CALIFORNIA	9	8	17	4	1	12
OREGON.....		3	3			3
<i>Total</i>	28					
THE DOMINION OF CANADA						
ONTARIO.....		1	1			1
QUEBEC	10		10	3		7
NOVA SCOTIA	2		2			2
NEW BRUNSWICK		3	3	1		2
PRINCE EDWARD ISLAND ...		1	1			1
<i>Total</i>	17					
NEWFOUNDLAND						
		2	2			2
<i>Total</i>	2					
<i>Grand Total</i>	353	166	519	98	23	398

TOTAL EXPENDITURE IN ALLOWANCES

YEAR	INSTITUTIONS	Number of Institutions	Number of Teachers in Faculties	Number of Retired Teachers on Roll	Average Age at Retirement on Basis of Age	Amount of Retiring Allowances Paid	Number of Widows Pensioned	Amount of Widows' Pensions Paid	Total Load of Allowances and Pensions	Total Amount Paid
1906 ¹	Accepted	52	2,261	46	71	\$15,478.53	5	\$1,124.97	\$77,935	\$16,603.50
	Unaccepted	32		37	70	6,474.53	3	124.98	48,910	6,599.51
1906-7	Accepted	55	2,309	88	70	77,574.09	12	8,039.06	129,855	85,613.15
	Unaccepted	48		55	71.6	47,954.11	4	2,420.00	77,525	50,074.11
1907-8	Accepted	62	2,444	124	70	146,140.47	19	14,989.48	203,290	161,129.95
	Unaccepted	59		66	70.5	80,134.26	10	5,378.20	100,215	85,512.46
1908-9	Accepted	67	2,968	185	69.7	206,472.57	33	24,545.00	313,985	231,017.57
	Unaccepted	62		100	69.8	104,536.86	13	8,316.67	152,335	112,853.33
1909-10	Accepted	71	3,512	198	69.6	291,403.98	40	33,795.04	382,120	325,199.02
	Unaccepted	77		92	70.6	132,497.51	17	12,137.77	138,950	144,635.28
1910-11	Accepted	72	3,593 ²	215	69.5	341,899.16	52	46,720.17	425,105	388,619.33
	Unaccepted	77		85	70.1	122,215.10	21	16,044.57	138,560	138,259.67
1911-12	Accepted	72	5,025	236	69.3	388,338.27	61	53,646.37	478,440	441,684.64
	Unaccepted	79		79	69.7	108,329.55	22	20,045.84	125,415	128,438.39

¹ July 1 to September 30.

² Estimated.

TOTAL LOAD OF ALLOWANCES ASSUMED

YEAR	INSTITUTIONS	Age	Service	Perma- nent Dis- ability	Tempo- rary Grants	Widows	Total	Deduct		Net Increase	Annual Load at End of Year
								For Deaths	For Dis- continu- ances		
1906 ¹	Accepted	28,546	\$34,915		39,975	\$4,500	\$77,935			\$77,935	
	Unaccepted	22,330	20,145		5,600	2,170	50,245	\$1,385		48,910	\$126,845
1906-7	Accepted	36,750	24,485		2,540	6,165	69,890	17,970		\$51,920	
	Unaccepted	11,040	23,355		3,370	500	38,265	9,650		28,615	80,535
1907-8	Accepted	28,200	27,450		9,600	8,675	73,925	4,480	\$600	\$68,845	
	Unaccepted	14,755	14,975		6,000	4,080	39,840	11,800	960	27,080	303,505
1908-9	Accepted	47,855	46,490		12,485	11,700	118,530	7,085		\$110,845	
	Unaccepted	20,540	30,500		5,100	2,220	58,360	6,190	1,500	52,170	163,015
1909-10	Accepted	56,315	12,820	\$2,515	7,000	7,025	85,675	17,830		\$48,475	
	Unaccepted	16,970		720	2,400	5,060	25,150	14,975	3,900	6,275	54,750
1910-11	Accepted	40,515		8,380	1,800	12,250	62,945	26,815	2,360	\$33,770	
	Unaccepted		3,010		1,000	2,955	6,965	3,920	4,220	1,175 ²	32,595
1911-12	Accepted	58,155		4,375		10,705	73,265	16,930	3,000	\$53,385	
	Unaccepted	5,600				3,000	8,600	10,745	1,000	3,145 ²	603,855

¹ June 1 to September 30.

² Decrease.

THE EXCHANGE OF TEACHERS BETWEEN PRUSSIA AND THE UNITED STATES

For the academic year 1912-13 the following American teachers have been assigned to Prussian *gymnasias*:

<i>Name</i>	<i>Institution from which he comes</i>	<i>Subjects in which he is a teacher</i>	<i>Gymnasium assignment in Prussia</i>
MARVIN FOSTER BEESON	Meridian College, Meridian, Mississippi	<i>English</i>	Victoria-Gymnasium, Potsdam b. Berlin
EDWARD MAURICE BRIGGS	University of Kansas, Lawrence	<i>Latin and German</i>	Gymnasium, Spandau b. Berlin
PAUL EASTERLING BRYAN	Roxbury Tutoring School, New Haven, Connecticut	<i>English</i>	Bismarck-Oberrealschule, Stettin
ERNST GOTTHILF FISCHER	Michigan Agricultural College, East Lansing	<i>English and Modern Languages</i>	Not yet assigned. Appointed for Easter, 1913
ISAAC ARTHUR LEE	High School, Malden, Massachusetts	<i>English and Modern Languages</i>	Realgymnasium, Stettin
STERLING ANDRUS LEONARD	State Normal School, Milwaukee, Wisconsin	<i>English</i>	Oberrealschule, Danzig
KEMP MALONE (reappointed)	Technological High School, Atlanta, Georgia	<i>English and German</i>	Realgymnasium, Erfurt
JAMES WILLIAM NORMAN	Howard College, Birmingham, Alabama	<i>Mathematics, Latin, and Greek</i>	Oberrealschule, Potsdam b. Berlin
THOMAS EMANUEL STECKEL	Tome School for Boys, Port Deposit, Maryland	<i>Modern Languages</i>	Kaiser Wilhelms-Realgymnasium, Berlin
WINSTON BRYANT STEPHENS	Holderness School, Plymouth, New Hampshire	<i>German and Sciences</i>	Gymnasium and Realgymnasium, Kolberg

The Prussian teachers with their assignments in the United States are as follows:

<i>Name</i>	<i>Gymnasium from which he comes</i>	<i>Subjects in which he is a teacher</i>	<i>Assignment in this country</i>
ANTON APPELMANN	Münster	<i>Modern Languages</i>	Boston High Schools, Boston, Massachusetts
ERWIN GSELL	Siemens Oberrealschule Charlottenburg b. Berlin	<i>Modern Languages</i>	Worcester Academy, Worcester, Massachusetts
KARL GUNTERMANN	Kgl. Gymnasium, Husum	<i>English and History</i>	Phillips Exeter Academy, Exeter, New Hampshire
HEINRICH KEIDEL	Kgl. Berger-Oberrealschule, Posen	<i>German and History</i>	University of Wisconsin, Madison
WILHELM KOPAS	Realprogymnasium, Gnadenfrei	<i>English, French, and Religion</i>	Tome School for Boys, Port Deposit, Maryland
OTTO MICHAEL	Hohenzollernschule, Schöneberg b. Berlin	<i>Modern Languages</i>	Horace Mann School, New York City
MAX MÜLLER	Kgl. Gymnasium and Realgymnasium, Thorn	<i>English and French</i>	Phillips Academy, Andover, Massachusetts

Since the inauguration of the exchange in 1907, 32 American teachers from 23 states have been placed for a year in Prussian schools, and 30 Prussian teachers have spent a similar year in American institutions. The various Prussian *gymnasias* that have received American teachers are those of Altona, Berlin, Bochun, Cassel, Charlottenburg, Danzig, Erfurt, Frankfurt a. M., Grunewald, Halle, Harburg, Kiel, Königsberg, Magdeburg, Potsdam, Saarbrücken, Schöneberg, Stralsund, and Wiesbaden. The 15 American institutions that have received Prussian teachers are: the Boston High Schools, Clark College, Columbia University, the Hill School, the Horace Mann School, the Mackenzie School, Massachusetts Institute of Technology, Pennsylvania State College, Phillips Andover Academy, Phillips Exeter Academy, the University of Chicago High School, the University of Wisconsin, Worcester Academy, the Worcester High Schools, and Yale University. The states from which American teachers have gone to Prussia are: California, Connecticut, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, Oklahoma, Pennsylvania, Rhode Island, Vermont, Virginia, and Wisconsin.

The plan has unquestionably proven its value. The general advantages of international knowledge and experience need, of course, no argument. The particular advantages of the present exchange of teachers are testified to by all that have been concerned with it.

The several American universities that have received Prussian teachers write that notwithstanding their familiarity with German culture and German educational methods, the presence of these foreign teachers has been not only agreeable, but stimulating to valuable new forms of contact with German ways of speech and German ways of thought. These universities emphasize especially the care exercised by the Prussian government in its selection of exchange teachers, and they conclude that "there is no question whatever as to the success of the project, or as to the desirability of its perpetuation and further extension."

To the participating colleges and secondary schools, both public and private, the exchange is of even greater value, in its cosmopolitan stimulus and its illumination of American conditions. I quote, with permission, comments from several of these institutions:

"I have been not only deeply interested in, but very much gratified by, our experience with these men so far. They bring to the school a great stimulus, especially to the teachers, and to the more serious and observant boy as well. The difference in point of view, and in training, are both interesting and helpful, and tend to a broadening of the horizon and sympathies of boy and teacher alike. We have been fortunate in the personality of both of the men who have come to us from Prussia. It is a fine thing for boys to meet men who have been trained under the severe and thorough methods of Germany, especially when the command of English which these men have enables them to share with us fully their views of the education and training of boys. This is quite as valuable

to the boy as to the teacher. In this regard also this school has been very fortunate, because both the men who have come to us have a fine use of English."

"It is a great pleasure to me to be able to testify to the value we attach to the presence of a Prussian exchange teacher in this school. Most certainly we desire to continue the arrangement. The boys are enthusiastic over his work, and his voluntary conversation classes are much overcrowded, and extremely popular. Apart from the work with the boys themselves, we find that our Prussian exchange teachers have contributed much to the intellectual and social life of the faculty. In my judgment any of our American schools would be justified in making generous sacrifices in order to add a Prussian exchange teacher to their force."

"We have been very well pleased with the teachers sent to us from Prussia to serve as exchange teachers. The influence upon the school has been excellent, and the exchange teachers have rendered a full return in teaching service for the money paid to them. We shall be very pleased to continue the practice of receiving such teachers, and hope that you may be able to assign such a teacher to us next year."

The value to the American teachers of entrance into the heart of the educational system of Germany is outlined at length in the report of each returning appointee. One such report has been printed by the Foundation, and may be had upon request. Some representative quotations follow, from the report of Mr. Paul Jones of De Pauw University, who spent the year 1911-12 at Frankfurt a. M.

"Before going to Germany I had heard a great deal of the cordial welcome accorded the American teachers, and it suffices to say that I was not disappointed in the reception I met. It was a pleasing surprise to find a great spirit of friendliness and good fellowship existing among the teachers of a German school, and it was a pleasure to become a member of such a happy circle. I was greeted in a very friendly manner by the *Director* and all of the teachers, who offered me every assistance. The teachers met in a social way, usually once a week, and I was always asked to take part in these gatherings. In addition, I was often invited to the homes of the teachers, which was a great advantage in gaining an insight into German life. It was also a great privilege to be invited to the meetings of the association of teachers of the higher schools. This invitation included not only the business, but social meetings as well."

"In an official way I found the German equally friendly. I was regarded as a member of the *Kollegium* or faculty, in spirit if not in fact, and was asked to all the regular monthly meetings. I was permitted to visit the classes of the school at will, and the teachers were always ready to explain their methods and the work. Any requests to inspect reports, work of the pupils, or class books, were readily granted. A request for permission to visit other schools met with the same ready response, and I was allowed to observe the work in *Gymnasien*, *Realgymnasien*, *Mittelschulen*, *Volksschulen*, and a school for backward children. In these schools I was given the same privileges as in my own school. Eight of my twelve hours a week were devoted to the conversation

classes. The other four hours were devoted to the regular English classes, a visit being made to each class every fortnight."

"I became thoroughly convinced that the Germans excel us more as modern language teachers than as teachers of any other branch. The beginning of a study of a foreign language at so early an age gives them an advantage which we cannot hope to overcome until we change our curriculum. The great factors are imitation and memory work. The young pupils are often required to commit whole pages of dialogue in French or English in order to secure the exact use of idioms and colloquial expressions. In fact, in all subjects a great deal of memory work is required. I think the most effective work I saw was done by teachers who have partially adopted the direct method. The mother tongue was used by them in connection with grammatical explanations, but was eliminated in all other cases."

"But it is not so much the German methods as the preparation of the teachers that accounts for the excellency of the school system. Briefly, the preparation of the German teacher is twelve years preparatory work, four years of university study, one year as *Seminarkandidat*, and one year as *Probekandidat*. Able-bodied men are required to serve one year in the army, so it can be seen that the youngest teachers are at least twenty-five years of age. Very few are so young, and many start at thirty. Such a preparation gives the teaching profession a dignity and a thoroughness which it has not reached in America."

An official summary is now being made of the experiences of the Prussian teachers in the United States, and the American teachers who have taught in Prussia are forming an association for the discussion and study of the experience gained there.

The Foundation is happy to aid in the continuance and the development of the exchange, and will be glad to send a copy of the printed plan to any one who is interested.

The qualifications of the applicant for appointment as Prussian exchange teacher should include good undergraduate training, ability both to read and to speak German, successful experience in teaching, and, if possible, the previous completion of some graduate study.

Applications for appointment to teach in Prussia, or requests from schools for a Prussian teacher, should be in the hands of the Foundation not later than the first of May prior to the year for which the assignment is desired. The assignments of both Prussian and American teachers are made about the first of August.

THE PUBLICATIONS OF THE FOUNDATION

THE object of the Foundation, as outlined in its Act of Incorporation, being both to provide retiring allowances and pensions, and "in general, to do and perform all things necessary to encourage, uphold and dignify the profession of the teacher and the cause of higher education," the provision of allowances and pensions has been

conducted from the beginning as a means to the improvement of educational conditions, and the trustees, from time to time, have authorized the study by the Foundation of various special educational problems, as these bear upon the functions of the Foundation in the provision of retiring allowances, or its wider efforts in behalf of the general advancement of teaching. Each year, therefore, the Foundation has issued one or more educational publications. Others that may be expected are mentioned in connection with the Educational Function of the Foundation, on pages 94 to 98 of this report.

The following publications, more fully described below, were issued during the year 1911-12:

The Sixth Annual Report of the President and of the Treasurer, *154 pages*.
Bulletin Number Six. Medical Education in Europe, *341 pages*.

A complete list of the publications hitherto issued by the Foundation comprises:

THE ANNUAL REPORTS

These contain in each instance: (I) An account of the business of the year, including the meetings of the trustees and of the executive committee, the admission of institutions to the accepted list, the voting of retiring allowances, and the general administration of the trust; (II) sundry results of inquiry into educational problems that affect the advancement of teaching. Some reference to these records is given in the following summaries; (III) brief biographies of recipients of retiring allowances who have died during the year; and (IV) the report of the treasurer.

The First Annual Report of the President and of the Treasurer, *84 pages*. 1906.

Including an historical sketch of the Foundation; a study of army and professorial pensions; and a statement of the general policy, the educational standards, and the administrative rules of the Foundation. (*Out of print.*)

The Second Annual Report of the President and of the Treasurer, *124 pages*. 1907.

Including discussions of the place of the college and the university in the United States, the function of college entrance requirements, the forms of denominational control, the relation of the Foundation to denominational and state institutions, and the ratio between institutional cost and efficiency. (*Out of print.*)

The Third Annual Report of the President and of the Treasurer, *211 pages*. 1908.

Including academic and financial data concerning institutions on the accepted list; and discussions of the problems of financial reports, pensions, and insurance; of the governmental and political aspects of tax-supported institutions; of entrance requirements, instruction, higher and professional education, and of the influence of denominational boards of education.

The Fourth Annual Report of the President and of the Treasurer, *201 pages*. 1909.

Including discussions of the rules for retirement, of agricultural education, of college administration and advertising, and complete records of the practice of the institutions on the accepted list of the Foundation in admitting regular, conditioned, and special students.

The Fifth Annual Report of the President and of the Treasurer, *113 pages*. 1910.

Including discussions of the relation of colleges to professional, technical, and industrial education, to secondary schools, to the training of teachers, and to state supervision; together with the comments of Oxford tutors on American education as represented by Rhodes scholars.

The Sixth Annual Report of the President and of the Treasurer, *154 pages*. 1911.

Including discussions of the application of the rules of retirement, and the obligations and influences of pension systems; together with a critical and constructive survey of education from a national point of view, as this is reflected in legislation, state systems, regional conditions, the relations of school, college, and university, in professional and graduate study and religious education, and in the problems of political and alumni influence.

The Seventh Annual Report of the President and of the Treasurer. 1912.

THE BULLETINS

Number One. Papers Relating to the Admission of State Institutions to the System of Retiring Allowances of the Carnegie Foundation, *45 pages*. 1907.

Including arguments in favor of the admission of state and provincial universities to the benefits of the Foundation, and a statement by the president of the administrative and financial problems involved. (*Out of print.*)

Number Two. The Financial Status of the Professor in America and in Germany, *101 pages*. 1908.

A study of the expenditure for instruction in one hundred and fifty-six American institutions, with comparisons of the maximum and average salaries, the average age, the amount of teaching, the appointment, tenure, and retirement privileges of professors in the United States and Canada and in Germany. (*Out of print.*)

Number Three. Standard Forms for Financial Reports of Colleges, Universities, and Technical Schools, *37 pages*. 1910.

Containing twenty-five typical blank forms for the public reporting of the financial receipts and expenditure of universities and colleges, with an introduction recommending the modification of current practice in directions commended by educators, accountants, and financiers.

Number Four. Medical Education in the United States and Canada, *346 pages*. 1910.

A comprehensive report to the Foundation, by ABRAHAM FLEXNER, on medical education in the United States and Canada, with regard to the course of study, financial aspects, medical sects, state boards, post-graduate schools, and other special forms of medical education; with descriptive and tabular accounts of all of the medical schools throughout the United States and Canada; and a general plan for reconstruction, with an introduction by the president of the Foundation.

Number Five. Academic and Industrial Efficiency, *134 pages*. 1910.

A report to the Foundation, by MORRIS LLEWELLYN COOKE, on the teaching and research in physics in eight American universities, colleges, and technical schools, with an endeavor to estimate efficiency in organization, teaching, research, the use of buildings, and in financial, departmental, and student administration.

Number Six. Medical Education in Europe, *357 pages*. 1912.

A report by ABRAHAM FLEXNER concerning the contemporary condition in Germany, Great Britain, and France, of the basis of medical education, the preliminary and the medical sciences, clinical instruction, curricula and examinations, post-graduate education, the medical education of women, the number and distribution of physicians, the financial aspects of medical education, and the problem of sects and quacks; together with an introduction by the president of the Foundation, contrasting these European conditions with those in the United States and Canada.

OTHER PUBLICATIONS

A Plan for an Exchange of Teachers between Prussia and the United States, *7 pages*. 1908.

Rules for the Admission of Institutions and for the Granting of Retiring Allowances, *16 pages*. 1906. Revised, *12 pages*. 1910.

An American Teacher's Year in a Prussian Gymnasium, *37 pages*. 1911.

All of the publications of the Foundation are sent regularly to all universities and colleges in the United States, Canada, and Newfoundland; and to a selected list of libraries and representative educators throughout the world. The distribution has been wide and without charge, except in the case of Bulletins Number Four and Six, for which fifteen and seventeen cents, respectively, have been asked for postage. The demand, however, is so large that it cannot be met in every instance. In case of special requests, a statement of the use to which the publications are to be put will be appreciated. In general, the publications of the Foundation may be consulted in most university, college, and public libraries.

As indicated in the lists given above, the First and Second Annual Reports, and Bulletins Number One and Two, are now out of print, and cannot be supplied.

PENSION SYSTEMS

In the last annual report I discussed at some length, under the title "Moral Influence of a Pension System," the general arguments in favor of pensions. In the interval there has been a rapid development of pension systems both for industrial workers and for public school teachers. Legislation looking to the establishment of pensions for public school teachers has been enacted by several states. In still other states the legislature has authorized cities, on their own initiative, to inaugurate pension systems. There follows a comprehensive statement of the legislation which has been had and the operation of these systems up to the present time.

It seems particularly needful at this moment to present such a view of the whole field, for most of these pension systems have been undertaken with the most casual actuarial advice. In this respect the action of our American legislatures has shown marked contrast to the legislative action taken in most of the British dependencies and in the European countries, where in nearly all cases careful actuarial computations have preceded the enactment of legislation. It is most important that states inaugurating such pension systems should clearly understand at the beginning the nature of the problem which they undertake. Otherwise, disappointment will follow both for the teacher and for the state officials. The experience of the past in pensions has made evident the soundness of a few fundamental principles, but above all this it has made clear the necessity for a strict actuarial investigation of every part of the problem. The following carefully prepared survey of recent pension legislation and of recent pension experience is therefore presented in the hope that it may serve both as a warning and as a guide to those who are dealing with these matters, whether as possible beneficiaries or as those responsible for legislation.

It should be borne in mind, as is clearly pointed out later in these pages, that a pension system founded upon a free gift by one individual rests upon an entirely different basis from a pension system inaugurated by a state in the interest of its servants. That which may be desirable and feasible in small groups of teachers scattered thru many colleges may be entirely undesirable and impossible in large state systems of teachers working under a general system of state employment. At the present day the consideration of pensions is being urged most strongly both from the standpoint of social justice and from the standpoint of increased efficiency of commercial and industrial organizations. The tendency is to enter into such plans upon insufficient data, and to set up systems which can only invite disaster and disappointment. Before any state approves a system of pensions for its teachers, the data for a complete study of the problem should be gathered and the best possible advice secured. The actuarial point of view is not the only point of view to be considered in the establishment of a pension system, but it is an indispensable point of view. Those concerned in these problems cannot fail to find in the experiences recorded in the following pages—such, for example, as those of the pension system of New South Wales, of the

New Jersey teachers' system, and other experiments there described—information of the most direct and practical significance.

COLLEGE PENSIONS

At the time of the establishment of the Carnegie Foundation, five of the institutions then admitted to its privileges, Columbia, Cornell, Harvard, McGill, and Yale Universities, had in force retiring allowance systems of their own. Two institutions since admitted to the accepted list, the Universities of California and Toronto, had also inaugurated retiring allowance systems. Except for continuing allowances to those retired before the Foundation existed, most of these separate systems are no longer in operation, the Foundation now carrying the load hitherto borne by the university funds. These systems were sometimes quite different from that afterwards put in operation by the Foundation. McGill University had not formulated general rules, each application for an allowance being treated as an individual case. The system of the University of Toronto was little more than a plan for compulsory saving; and the Cornell system contained a contributory feature. The Harvard rules approximated rather closely to those of the Foundation, but the age of retirement was fixed at sixty years after twenty years of professorial service. The Columbia statutes simply provided for retirement at half pay for any professor over sixty-five years of age who had served fifteen years. None of these institutions had continued these activities long enough to throw much light upon the conduct of such systems or to appreciate the load they had assumed.

Since the establishment of the Foundation, several institutions of higher education, ineligible to the accepted list on account of legal connection with a religious denomination, have established retiring allowance systems for their professors. Haverford College, all the members of whose board of trustees, technically styled board of managers, are required by a by-law of the board to be members of the Religious Society of Friends, has received gifts of about \$150,000 to inaugurate such a system. No allowances have yet been granted from this fund, and the interest is being added to the principal. The rules are almost identical with those of the Foundation, except that the maximum for a retiring allowance is \$3000. Brown University, a majority of both of whose governing boards are required by its charter, granted in 1764, to be Baptists, is accumulating a new fund of \$1,000,000 for various educational purposes, one of which is to be the endowment of a retiring allowance system. Within the last year the University of Chicago, whose president and two-thirds of whose trustees are required by charter to be Baptists, has set aside a sum which eventually will be not less than \$2,000,000, in order to inaugurate a system of retiring allowances. The statute for granting the allowances and pensions coincides almost exactly with those in force in the Foundation. There are only two divergences from the rules of the Foundation: one in which it is stated, "The obligation of the university to pay retiring allowances

shall be neither more nor less than its obligation to pay salaries to persons in active service, so that if misfortune should compel a percentage reduction in salaries, retiring allowances may be reduced in the same proportion ;” the other is a declaration that, while the trustees reserve the power to alter the statutes for granting retiring allowances, no alteration shall have any effect upon persons who have come within the purview of the statutes before the alteration is made. The provision that retiring allowances impose no greater moral obligation upon the institution granting them than is imposed by salaries is a frequent clause in pension statutes, almost the exact phraseology of the statute of the University of Chicago being found, for example, in the former retiring allowance system of Harvard University, and in the rules of the pension fund established by the International Harvester Company.

The University of Wooster has undertaken to raise the sum of \$200,000 in five years, for the Retiring Allowance Fund for the Advancement of Teaching of the University of Wooster. The Presbyterian Synod of Ohio has taken up the work, and has appealed to all the Presbyterian churches in Ohio to contribute two dollars for each member. One year has elapsed since the undertaking began, and \$33,000 has been raised, together with a pledge of \$10,000 to be paid when \$90,000 is in the fund. The plan is for retiring allowances at the age of sixty-five years, or after twenty-five years of service, the annuity to be one-fortieth for each year of service up to thirty years. A similar pension is to be given for disability, and there are to be widows' pensions and provision for orphans. No endowment of this growing and active institution could be more helpful than this fund for teachers' pensions. It will be a serious mistake if the friends of the institution, who have given generously for endowment funds and buildings, shall withhold support from that form of endowment which most directly touches the well-being and contentment of the teacher.

Many of the institutions upon the accepted list of the Foundation have a considerable number of teachers who do not come within the operation of the rules of the Foundation. Columbia University, thru the board of trustees of its Teachers College, has provided retiring allowances for certain of the teachers in that college and its schools who are high in rank and who are not eligible for the benefits of the Foundation. This system takes the form of a fund established by the trustees and increased by the annual contribution of two per cent of the salary of each eligible teacher who chooses to seek the benefits of the system. The teacher is eligible to retirement upon his own request, at fifty years of age, after fifteen years of service, at fifteen per cent of his average salary for the last five years; this allowance is increased by two and a half per cent of this average salary for each additional year of service after the teacher becomes eligible to retirement, but the allowance is in no case to exceed fifty per cent. Any contributor who withdraws from service before retirement receives back his accumulated contributions, and his legal representatives receive them in the event of his death before retirement; in both cases with four per cent interest. It is expressly stipulated that a retiring allowance may be terminated at any time by the committee

of the board of trustees on the retirement of teachers. The serious difficulty with such a retirement fund, if it were widely extended, is that it is voluntary. Experience has proven that voluntary pension systems are inadequate. Only a fraction of those entitled to contribute ever elect to do so; for the rest there remain the same personal distress and the same administrative difficulties that a pension system is instituted to remedy.

A detailed account of the retirement funds in German universities was published by the Foundation in its Second Bulletin in 1908. During the last year a graduate of Baliol College gave to the University of Oxford a small sum as the nucleus of a retirement fund for its professors. Hitherto the two great English universities have not felt a pressing need for pensions, as under their system the duties of an aged teacher could easily be assumed by others without necessitating his retirement.

PENSIONS FOR PUBLIC SCHOOL TEACHERS: STATE SYSTEMS

Only six states have pension systems for public school teachers which may properly be denominated state-wide. In most states the utmost that has been accomplished is the enactment of laws permitting the larger cities to create some kind of pension fund; this, of course, leaves unprovided the more necessitous cases of rural school teachers. Many states, unfortunately, have not even permitted their large cities to provide pension funds for teachers.

The six states that have thus far advanced to a pension provision for all of the public school teachers within their limits are Virginia, Maryland, Rhode Island, Wisconsin, New Jersey, and New York.

The Virginia law, which in its present form was enacted in 1910, vesting the control in the state board of education, only pledges the state to contribute \$5000 a year. One per cent is deducted from the salaries of the teachers, who are entitled to retirement upon disability after twenty years of service, and to regular retirement after thirty years of service, upon reaching the age of fifty-eight, if a man, and fifty, if a woman. The pension is to be one-eighth of the average salary for the last five years, but no pension is to exceed \$500 a year. In 1912 the pension roll contained 310 names, involving an expenditure of about \$41,000. The number of public school teachers in Virginia is 10,443. As the receipts of the fund were only \$38,500, made up of \$5000 from the state, \$32,000 from assessments, and \$1500 from the income on invested funds, the board of education has already been forced to pro-rate the pensions.

Maryland enacted in 1908 an invariable pension law for the public school teachers of the state, without contributory features, up to the amount of an annual appropriation by the state of \$25,000. Teachers who have taught twenty-five years in Maryland, and are sixty years of age, or are permanently disabled, and are without comfortable means of support, are entitled to pensions, which are in all cases to be \$200 a year. Maryland public school teachers number 5514.

Rhode Island has a pension law, enacted in 1907, for which the state made in 1912 an appropriation of \$33,000. Pensions are granted to all teachers sixty years of age, who have been in service for thirty-five years, twenty-five of which, including the fifteen years immediately preceding retirement, have been in Rhode Island. The pension is to be one-half of the average salary for the last five years, but is never to exceed \$500 a year. In 1912 the 2371 teachers in the state furnished 89 to this roll; the average pension was \$336.68.

The 1911 legislature of Wisconsin, where teachers' pensions had been previously confined to the city of Milwaukee, established a pension system for the entire state, which has 14,729 teachers. The state contributes annually ten cents for every person of school age in Wisconsin, and assesses contributions of one per cent upon teachers in the first ten years of their service, and two per cent from their tenth to their twenty-fifth year of service, the assessments not to exceed \$15 and \$30 a year, respectively; after twenty-five years of service there is no assessment. Teachers in service before September 1, 1911, have an election as to whether they shall be assessed or not, and accrued liabilities are to be deducted from the beneficiary's initial payments. Pensions are granted on a strict service basis after twenty-five years of service, eighteen years of which must have been in Wisconsin, or upon disability after eighteen years of service. The pension is \$12.50 for each year of employment, but no pension is to exceed \$450 a year. As the plan is a contributory one, there is a withdrawal feature, any teacher leaving the service being entitled to receive back one-half of his contributions, without interest.

NEW JERSEY

The state of New Jersey has two pension systems in operation, both state-wide. One of them is a law, first enacted in 1903, and altered in 1906 and 1912, by which the local school authorities are required to pay out of the local school funds a pension amounting to one-half of the average annual salary for the past five years to any teacher, principal, or superintendent who has been employed for thirty-five years "in the public school work," provided that twenty years of this service have been passed in the schools of the local educational authority by whom the pension must be paid. The other system is a fund supported by compulsory deductions from the teachers' salaries, out of which moderate annuities are paid to teachers who may become disabled after twenty years of service.

The history of this fund began in 1896, when the legislature of New Jersey constituted the board of trustees of the Teachers' Retirement Fund. This board is at present composed of the commissioner of education *ex-officio*, three trustees not teachers, appointed by the governor of New Jersey, and five trustees elected by the teachers of the state. Entrance into this fund was voluntary, all teachers then in the service being required to make their election as to entrance within three months after the passage of the act, and all teachers beginning their service being required

to make such election within a year after their employment. Those entering contributed one per cent of their salaries, and were eligible to retirement for disability after twenty years of service in the public schools of New Jersey. The annuity was to be one-half of the average annual salary for the last five years of service, no annuity to be less than \$250, nor more than \$600, raised by later legislation to \$650; and if any teacher was retired within five years after the passage of the act, he must add to his contribution already made additional sums sufficient to make his total contribution equal twenty per cent of his last annual salary. One-half of his total contributions had to be returned to any teacher resigning from the service after having contributed for five years. The annuities were to be paid in quarterly instalments, and if there were insufficient resources in the funds to pay the aggregate amount of any instalment, the state treasurer was to register the warrants thus necessarily unpaid, and as money was received by the fund all warrants were to be paid in the order of their registration, with interest at five per cent, until the fund was again abreast of its liabilities.

In the year of the enactment of this law enough teachers joined the fund to make the contributions amount to \$11,000. In the following year the regular contributions of one per cent, with the additional contributions of twenty per cent of the last annual salary of those desiring immediate retirement, amounted to nearly \$15,000. In the succeeding year the total contributions were \$12,000. Annuities began to be granted in the second year of the fund's operation and amounted to \$2400; in the following year the outstanding annuities amounted to \$5400.

Within three years after the creation of the fund in 1896 the legislature of 1899 deemed it wise to amend the law. The fund was extended to teachers in the state normal and reformatory schools, and made specifically to apply to all school and supervising principals, and, by later legislation, to superintendents. The other amendments were all in the direction of greater financial caution. The provision that a teacher retiring within five years after the passage of the act of 1896 was to make up his contribution to equal twenty per cent of the last annual salary was extended to all teachers retiring at any time and after any period of contribution. The board of trustees was authorized to suspend an annuity if it became satisfied that an annuitant was capable and had the opportunity of earning a livelihood. By the legislation of 1907 this is confined to cases where teachers are actually in active employment. The income of the fund was somewhat augmented by extending the deduction of one per cent to the annuities granted, a somewhat curious piece of circumlocutory legislation. The naïve assumption of the previous act, that if a deficiency occurred in the fund it would probably be made up and that the full instalment of pensions could gradually be paid in full with interest in order of their falling due, was abandoned, and instead it was provided that in case of a deficiency at any quarterly instalment, all the quarterly annuities due were to abate pro rata. This would enable the fund to start paying anew each quarter, whereas the original legislation, in case

of a calamity, would have made possible the spectacle of some annuitants receiving nothing, while the fund was engaged in satisfying fully the long past instalments of older annuitants.

By the time the legislature of 1903 convened, the experience of the fund for six years was available. The total annual contributions had practically not increased, having amounted to only \$16,000 in the previous fiscal year. The value of the annuities for which the fund was liable had grown to nearly \$13,000 a year. It was evident that unless changes were made, the time would soon come when the annuity liabilities would exceed the contributions. The legislature of 1903 therefore changed the retirement laws in several important respects. In the endeavor to enlarge the number of contributions to the fund, the restriction as to the period in which the teacher was to make his election to join disappeared, but no teacher was to be permitted to enter after fifteen years of service without passing a satisfactory physical examination. For teachers already contributing and for new entrants into the fund in their first ten years of service, the rate of contribution was to continue at one per cent of their salaries, as was to remain the deduction from annuities, but for new entrants who had taught more than ten years the rate of contribution was raised to two per cent.

The effect of this legislation of 1903, altho not great, was immediately perceptible. The contributions rose in the then current fiscal year to \$22,600, but the effect was exhausted by this increase, and in the three succeeding years the total of the contributions remained stationary around this amount. The total value of the outstanding annuities rose also in the fiscal year 1902-03, reaching \$16,800, but they did not remain stationary, the value mounting up year by year to \$21,000, to \$26,000, and to \$32,000. With contributions, less the return to teachers who resign, standing at \$21,000, or \$11,000 less than the liabilities, the fund in 1906 faced a crisis.

The legislature of 1906 met this situation by a thorough reorganization of the fund. The fund was changed from a voluntary to a compulsory one, all teachers entering the service after January 1, 1908, being compelled to assent to the deduction from their salaries. The rates of contribution were radically changed, being fixed at two per cent during the first ten years of service, at two and a half per cent between ten and fifteen years of service, and at three per cent for all periods of service over fifteen years, but no teacher was to contribute more than \$50 in any one year, or more than \$1000 altogether. Total contributions must, however, be made up to equal one year's annuity before such annuity would be granted. The general character of the fund was also modified by abolishing the rule returning to teachers who resign one-half of their contributions; there was to be no return of contributions. This legislation seemed to its framers to put the fund on so sound a basis that there was no necessity for contemplating any deficiency; the provision concerning the abatement of annuities was therefore omitted. This reorganization came just in time to save the fund from collapse. The annuities, which the act hardly increased, rose steadily in the year in which this legislation was enacted and in the following two years to the figures

\$45,000, \$57,000, and \$68,000, respectively. If the new act had not been passed, there is no reason to suppose that the total contributions would not have remained at \$21,000. The increased rate of contributions, even in the year in which the act was passed, raised the receipts to \$35,000, and in the following year to \$53,000, which, altho still leaving a deficit, reduced it to smaller dimensions. In 1908-09, when the effect of the compulsory feature began to be felt in full, the contributions jumped to \$93,000, overtopping the liabilities by \$25,000.

For the fiscal year 1910-11 the total receipts of the fund from contributions were \$166,000, and its total annuity liabilities were \$120,000. The fund, therefore, is for the present secure, altho it should be noted that the state, in appropriating \$1500 for the annual expenses of the board of trustees, expressly declares "that such expenses shall be in no wise a guarantee on the part of the state as to the security, conditions, or prospects of the funds."

The salient facts in the history of the New Jersey teachers' fund are, first, the small proportion of teachers comparatively that entered into a voluntary fund even when constructed upon a liberal basis, and second, the speedy inadequacy of a one per cent contribution to maintain the moderate annuities paid by the fund. The fact that this rate of contribution could be assessed only upon those who came into the fund voluntarily does not alter materially its significance; if such a rate had been compulsory upon all teachers, the annual deficiency would not have been long postponed.

The characteristic features of the fund as now constituted are that no part of the contributions are returned in case a contributor resigns or dies before receiving an annuity, all contributions being solely for the benefit of those who become annuitants; and that the fund is solely upon a disability basis, superannuation being conceived as a disability. A distinctive feature of interest is the grading of the rate of contributions, with certain maximum limits, according to the approach of the contributor to the pensionable period. This is in practice a rough approximation to grading of contributions according to salary, as salaries have a tendency to rise with years of service, but it is only a rough approximation. The democratic composition of the board of trustees should also be noted.

NEW YORK

The state of New York has two pension systems, one for teachers in any institution maintained and supported by the state, the other for teachers in the public schools. Altho the latter system at its inception does not include the teachers in those counties, cities, and districts which have been permitted by law to establish separate pension systems of their own, the law establishing it is so framed that eventually the system may embrace all the public school teachers in the state.

The first system, that for the teachers in the colleges, schools, and institutions maintained and supported by the state, was enacted by the legislature of 1910, and amended

by the legislature of 1912. It provides for an annuity equal to one-half of the final salary, not to exceed \$1000 nor to be less than \$300, to every teacher who has served for ten years in the institutions maintained by the state of New York, and has served in any college, academy, or public or private school in New York or any other state or country for thirty years. In case of disability the latter period is reduced to twenty years.

As originally passed, the teacher must have attained to the age of seventy years, or in case of disability to sixty-five years, and the ten years of service in the state institutions must have been the ten years immediately preceding retirement. The amendment of 1912 eliminates these requirements.

This pension system is non-contributory, the cost of the annuities being borne entirely by the state treasury. The appropriation for this purpose was \$4900 in 1911, and \$7000 in 1912.

The other pension system, that for public school teachers throughout the state of New York who are not teaching in counties, cities, or districts which by special laws have retirement systems of their own, was enacted by the legislature of 1911.

This law creates a state Teachers' Retirement Fund Board of five members, to be appointed by the state commissioner of education for the term of five years, one member retiring each year, the members to be removable by the commissioner upon written charges after hearing. At the time of appointment one member must be a superintendent of schools in a city or district, one member must be an academic principal, and one member must be a teacher engaged in teaching in an elementary school. At least one of the five members of the board must be a woman teacher. The expenses of the members of the board are paid by the state, but they serve without compensation; the board, however, has a secretary with a salary of \$2000 a year. The treasurer of the state is the treasurer of the board and the custodian of its funds, and pays the annuities granted.

Retirement applies to those who have taught in public schools for twenty-five years, the last fifteen years of which shall have been in the public schools of the state of New York affected by the law. In case of disability the entire service required in public schools is fifteen years, the last nine of which must have been in the schools under the operation of the law. The annuity shall be one-half of the salary paid to the teacher at the time of retirement, but no annuity shall exceed \$600.

To support this pension system, the state reads into every contract for the employment of a teacher in any public school outside of the excepted counties, districts, and cities, a provision deducting one per cent of the salary of the teacher, which deduction it is made the duty of the authorities of the school or district to forward to the state treasurer upon each payment of salary. Any teacher in the schools and institutions within the statute who is employed under a contract entered into prior to the taking effect of the statute may elect to contribute in like manner one per cent of the salary received, and shall thereby become entitled to all the benefits of the law.

A teacher, however, shall not be entitled to an annuity who has not contributed to the retirement fund "an amount equal to at least thirty per centum of his annuity." But by making up the said amount by a cash payment, or by the withholding of the annuity until the payments withheld make up this required amount, the teacher shall become entitled to an annuity.

The public school teachers in any county, city, or district to which the act does not now apply by reason of their possessing a special retirement fund of their own under authority of law, may, by presenting to the Retirement Board a petition signed by two-thirds of their number, be included within the pension system administered by the state board. In this case all the funds of such special retirement system must be turned over to the state treasurer for absorption by the state retiring fund, and the state thereupon assumes the liability to pay all existing annuities granted by the local retirement system. The teachers of the county, city, or district thereby included within the state retirement provision of course become subject automatically to the deduction of one per cent from their salaries. The exceptions to the law are the counties of Westchester, Nassau, and Saratoga, and the cities of New York, Buffalo, Rochester, Syracuse, Troy, Albany, Elmira, Schenectady, Cohoes, Poughkeepsie, Watervliet, Yonkers, and Mount Vernon. All of these localities have their own pension systems. The teachers in these cities number 22,943, leaving 22,131 to be affected by the state law. This includes several hundred teachers each in the counties of Westchester, Nassau, and Saratoga, who should be deducted from the state teachers and added to those in cities possessing pension systems of their own.

The Retirement Board is authorized to receive for the fund not only the contribution of one per cent of the salaries of teachers within the act, but also "all donations, legacies, gifts, and bequests, which shall be made to such fund," and "appropriations made by the state legislature from time to time to carry into effect the purpose of such fund."

The act must contemplate large annual appropriations by the legislature of New York from the public treasury, because three provisions of the pension system created by the act render it extremely improbable that the fund will ever be able from the teachers' contributions to pay the liabilities put upon it by the law.

First. There is no financial provision or support for the accrued liabilities beyond the thirty per cent of the annuity. This will prove a heavy burden.

Second. The period of contribution of new entrants does not cover necessarily their entire thirty-five years of service, but only the fifteen years in which they have been teachers in the public schools within the operation of the law.

Third. One per cent is a very small contribution to support even a modest pension scheme. All the large governmental pensions now in operation, or in contemplation, carry a much higher rate of contribution.

No relief can be expected from the possible absorption of the present local pension systems, but rather the contrary. Some of these systems are already in an embarrassed

condition. The teachers in these systems will be eager to become part of the state system; wherever, on the other hand, a local retirement organization is financially solvent, the members will hesitate to abandon such a secure status.

The New York state teachers' pension system resolves itself into the expectation that such a proportion of teachers will die or retire before the pensionable age, that the receipts from a one per cent contribution from all will provide such a proportion of the pensions of those that survive that the public treasury will not be severely burdened to pay the remainder. This assumption is extremely doubtful. Furthermore, the history of all pension systems shows that the contributors soon become restless under this unequitable arrangement, and demand a return of their contributions to themselves or their heirs in case of premature retirement or death. This demand is extremely difficult to resist, but to accede to it would destroy entirely the basis of the New York system, and would impose upon the state treasury an annual burden which might amount to millions. The state should reconstruct the entire system under competent actuarial advice before its obligations have caused embarrassment and disappointment.

PROPOSED STATE SYSTEMS

Bills contemplating state-wide pensions for teachers are now before the legislatures of Connecticut, Iowa, Maine, Michigan, Washington, and Vermont, and before the Congress of the United States for the teachers of the District of Columbia. A bill approved by the San Francisco teachers at a general meeting in October, 1912, will be presented probably to the legislature of California upon its assembling in 1914.

The legislation proposed in Maine is for a pension system to be supported entirely by the state, for which there is to be an annual appropriation from the state treasury of \$20,000. From this appropriation pensions are to be provided for all public school teachers who have reached the age of sixty years, and who have been engaged in teaching as their principal occupation for thirty years, twenty years of which employment, including the fifteen years immediately preceding retirement, shall have been spent in the public schools of Maine. The pension is to be one-half of the average annual salary during the last five years of service, no pension to be less than \$250 nor more than \$500 a year.

It is extremely doubtful whether \$20,000 will be sufficient to defray such a pension system beyond two or three years. It would seem wiser for state teachers' associations contemplating the presenting of pension legislation to gather first the vital statistics and salary data for the teachers to be included, and then submit these data to actuaries for analysis. In this way the legislature can be informed concerning the probable cost of the proposed system, and it is better to encounter at the beginning the greater difficulty of a known higher cost than to get a bill passed under a misapprehension which, when it is understood later, may affect seriously all pension action, public and private.

In Wyoming the proposal is to pension teachers of sixty-five, or those disabled at an earlier age, who have served twenty-five years in teaching, twenty of which have been in Wyoming. The pension is to be \$360 a year, and the source of the pension fund is to be the income from certain school lands of the state, the amount of which is not given.

The bill proposed in California would constitute a fund by deducting one dollar monthly from the salaries of all teachers, and by appropriating the residue of the proceeds from the succession and inheritance tax laws of the state "not specifically appropriated for the use of the State School Fund and for other educational purposes." Out of this fund a pension of \$600 a year is to be paid to any teacher whose public school service has been thirty years, twenty of which, including the last fifteen years of service, have been in the public schools of California, provided the teacher has contributed to this fund, or any preceding fund authorized by law, the sum of \$360. Upon disability, after fifteen years of service, pro rata pensions are to be granted.

In the year 1910 there were in California 11,369 public school teachers. A one dollar deduction monthly from their salaries would produce \$136,428. Such an amount would not be available at once, because the law includes only future teachers and such present teachers as may elect to enter the pension plan. This amount would probably be adequate for some years, apart from the residue of the proceeds from the succession and inheritance tax laws, which is naturally not calculable, but such a fixed sum, not flexible to the cost of the system, will in time lead to difficulty. The accrued liabilities, fixed by requiring a sum equal to the monthly contribution for thirty years, were obviously not calculated upon any actuarial basis.

The bill offered in Congress by Mr. Johnson of Kentucky, at the request of the Board of Education of the District of Columbia, provided for an annuity fund to be supported, first, by an appropriation equal to one and a half per cent of the total appropriation to pay the salaries of the public school teachers in the District of Columbia, to be payable, as is the case of all appropriations in the District of Columbia, half by the District and half by the treasury of the United States, and secondly, by a deduction from the salaries of all teachers. These deductions were to be one per cent for teachers of ten years of service or less, and two per cent for teachers between ten and twenty years of service, and three per cent for teachers who had served more than twenty years.

From the fund so constituted annuities were to be granted to all teachers whose service in day schools aggregated thirty years, fifteen years of which must have been in the public day schools of the District of Columbia. Full disability allowances were to be granted upon twenty years of service, ten years of which must have been in the District, and pro rata disability allowances to those who had taught five years in the public day schools of the District of Columbia. The annuity was to be six-tenths of the average annual salary for the last five years of service, no annuity to

be less than \$600 nor more than \$1200, but no annuitants were to enter upon the fund except what the income for the preceding year showed it could support, and in the event of any deficiency, annuities were to be pro-rated. The accrued liabilities were to be met by deducting from annuities the yearly contribution which a teacher would have contributed if the fund had been in existence during the period of contribution provided for.

Upon the death of any teacher before retirement, the wife, children, or dependent parents, or a beneficiary named in the will was to be entitled to one-half of the teacher's total contributions.

The fund was to cover all teachers entering the service after passage of the bill and all teachers employed in the public schools of the District of Columbia at the time of its passage who did not within thirty days thereafter notify the superintendent of public schools that they did not wish to accept its provisions.

The fund was to be administered by a board of trustees consisting of three members of the board of education of the District of Columbia elected annually by the board, the superintendent and assistant superintendents of public schools of the District *ex-officio*, and nine teachers of the public schools, three representing the normal, high, and manual training schools, three the teachers of the intermediate grades, and three the teachers in the primary grades and the kindergartens, each trustee to serve for the term of three years, one of each class to be elected each year. In each respective department of teachers two of the trustees to be elected must be white and one colored, the white teachers to vote alone for the white representatives and the colored teachers to vote alone for the colored representative.

By direction of the legislature of Massachusetts, the state board of education is preparing a report on teachers' pensions, which the board announces will be ready for presentation to the legislature of 1913.

The last legislatures in Georgia, Indiana, and Michigan failed to pass pension bills recommended by the teachers of their respective states.

The Indiana bill provided for annuities for all public school teachers who have reached the age of fifty-five and who have served thirty-five years in teaching, thirty years of which must have been in the public schools of Indiana or in Indiana schools of equivalent rank, and five years may have been in the public schools of any other state. Invalidity pensions might be granted after fifteen years of service in the Indiana public schools. The annuities were to be one per cent of the average salary for the last five years for each year of service, no annuity to be less than \$250. The cost of this system was to be defrayed by a one per cent assessment upon all teachers' salaries and annuities, the balance to be met from the state school tuition tax. The only provision for accrued liabilities was the requirement that an annuitant make up in contributions his first year's annuity. As all experience shows that a one per cent contribution is inadequate to meet the requirements of a moderate pension system, the amount needed annually from the school tuition tax fund would have been heavy.

The constitutions of Pennsylvania and New Hampshire contain prohibitions against state pensions other than those for military and naval service. Until such constitutional prohibitions are repealed, no other action is possible. In Pennsylvania an agitation for such repeal has been organized by the teachers of the state; in New Hampshire an amendment repealing this clause was presented to the people at the last election, but failed to command the necessary two-thirds majority.

LOCAL SYSTEMS

The state of Kansas permits cities of the first class, which includes the ten largest cities in the state, to establish retirement funds, to be supported by an assessment on salaries of not less than one per cent and not more than one and a half per cent, and by an appropriation from the general fund for the support of schools in the city of an amount not less than one and a half times the amount of the assessment.

The legislature of Kentucky in 1912 created a Teachers' Annuity Fund of Louisville, to be composed of one member of the city board of education, one principal, and four public school teachers, the principal and teachers to be elected by the teachers of the city. The maximum annuity is to be \$400, based upon forty years of service, less than forty years of service to entitle the annuitant to the equivalent proportion of \$400, regular retirement to be possible after thirty years of service, and invalidity retirement after twenty years. The fund is to be supported by an assessment of one per cent (not to exceed \$10 in any one year) upon the salaries of all teachers whose service is less than fifteen years, and an assessment of two per cent (not to exceed annually \$20) upon the salary of every teacher who has taught more than fifteen years. Upon resignation from the service before retirement one-half of the total contributions of the teacher are to be returned. There is no provision for accrued liabilities.

The state of Minnesota permits cities having a population of ten thousand or over to establish a local Teachers' Retirement Fund Association, and to make for its assistance a local levy of not to exceed one-tenth of one mill.

The state of Utah, by a law of 1907, permits any city of the first or second class and any county, upon the petition of a majority of the teachers therein, to establish a Public School Teachers' Retirement Commission. To support these funds, assessments of one per cent may be levied upon all teachers' salaries, and deductions are made from the salaries of absent teachers, not to exceed five days for any one teacher in a single year. Any teacher who is sixty years of age and has taught thirty years, one-third of which shall have been in the district or county, shall be entitled to retire upon an annuity equal to one-half of the average annual salary for the last five years. Disability pensions may be granted after thirty years of teaching, five of which have been in the district or county. Before retirement the annuitant must make up a sum equal to one per cent of the salary for the entire period of service. Under this law Salt Lake City has had a pension fund in operation since 1908.

The state of Ohio permits the board of education of a school district to create a school teachers' pension fund for that school district, to be supported by a deduction of two dollars from each monthly salary of all teachers employed after the creation of the fund, and of the teachers previously employed who shall elect to join the fund. The board may retire for physical or mental disability any teacher who has served twenty years in public schools, one-half of which has been in the schools of the county in which the school district is located. After thirty years of service, half of which have been as above provided, any teacher may retire, the pension to be twelve and a half dollars annually for each year of service, but not to exceed \$400 a year; but if the fund is insufficient, all pensions must be pro-rated. Every beneficiary must have contributed twenty dollars for each year of service, but not to exceed \$600.

The state of Illinois has enacted two sets of laws with regard to pensions for public school teachers. One law is for cities of one hundred thousand inhabitants, that is, the city of Chicago. The other law is for all the other boards of education in the state.

MUNICIPAL SYSTEMS

The law for Chicago, which was passed in 1911, is mandatory. It creates a board of trustees of the public school teachers' pension and retirement fund, to be composed of the secretary of the board of education *ex-officio*, two members to be elected by the board of education annually out of their number, and six members to be elected by the public school teachers of the city, two each year. After twenty-five years of service as a public school teacher, or after fifteen years of service and disability certified to by three competent physicians at the request of the board of trustees, a teacher shall be entitled to a pension, provided that in all cases three-fifths of the said periods of service have been in the public schools of Chicago. The pension shall be an annuity of \$400, or in case of retirement for disability, such proportion of \$400 as the total contributions required for a full annuity. Teachers who have taught five years contribute five dollars a year, those who have taught more than five years and less than ten years contribute ten dollars a year, those who have taught more than ten years and less than fifteen years contribute fifteen dollars a year, and those who have taught more than fifteen years contribute thirty dollars a year. Any teacher leaving the service voluntarily before serving fifteen years receives back one-half of his total contributions; a teacher discharged or not reemployed receives back the total of his contributions. Accrued liabilities are provided for by requiring the teacher to contribute a sum equal to what he would have contributed if the law had been in operation during his period of past service, with interest at four per cent. Any teacher who has been a contributor to the previous pension fund of Chicago, but has withdrawn, may become entitled to the benefits of this new fund by contributing the full amount that he withdrew from said pension fund, together with the full amount he would have contributed had he not withdrawn, with four per cent interest. All teachers

employed by Chicago after July 1, 1911, have this law read into their contracts of employment. Teachers employed at that time in Chicago had until July 1, 1912, to exercise their option as to whether they would accept the obligations and benefits of the law or not.

The board of education of Chicago is directed to contribute annually a sum equal to the total contributions from all the teachers, being empowered to use therefor any sum deducted from teachers for absence after the payment of a substitute has been met. If the total contributions by the board of education do not equal the interest received by the board on the public moneys in its hands, it may add the overplus to the pension fund, provided that the total of the amount of interest so added to the fund does not exceed one per cent of the money raised by taxation for school purposes.

To all boards of education in Illinois, except the board of education of Chicago, the creation of a teachers' pension fund is permissive. The provisions of the fund, when once created by a board of education, are the same as the law applicable to Chicago in so far as the conditions of retirement, the amounts and conditions of the teachers' contributions, and the provisions for withdrawal are concerned. Instead of the board of education being required to contribute an amount equal to the teachers' contributions, it is provided that in case there is not sufficient revenue from contributions to maintain a teachers' pension fund, the school district, by a majority vote, may establish a fund for the retirement of teachers who are over fifty years of age and have served twenty-five years, the annuity to be one-half of the last annual salary, but not to exceed \$400. The fund so established may be supported from such revenues as may be devoted to the purpose by the directors of a district or by direct appropriation by a town.

The board of education of Chicago is required, by an act of 1903, to establish and maintain a public school employees' pension fund, to be administered by a board of trustees, consisting of the president and secretary of the board of education *ex-officio*, and four other members elected by the employees contributing to the fund. The fund is a voluntary one, both in an option being allowed as to entrance and in free permission to withdraw from making further contributions. Neither are the amounts of the annuities stated nor the rates of contribution, the rules on these matters being remitted to the discretion of the board, subject to the proviso that "said benefit or annuity shall be proportionate to the amount of the contributions of such employee," and that deductions from salaries are not to be less than twelve dollars a year, nor more than forty-eight dollars.

Annuities are to be granted to employees who have reached the age of fifty-five years, and who have been in the service of the board of education of Chicago and have contributed to this fund for ten years. An employee who has been in the service of the board of education for twenty years may be retired without regard to age or period of contribution, and in case of disability, ten years' contribution to the fund

is sufficient. Upon dismissal or resignation the employee shall receive back one-half of his total contributions. Contributions made by employees to the public school teachers' and public school employees' fund of Chicago under the act of 1895 were handed over to this fund, as all annuities granted by said former fund were assumed by it. Under the meaning of this act the term "employee" is declared to include engineers, janitors, and office employees of the board of education receiving a salary of over \$49 a month.

When Porto Rico was transferred from the sovereignty of Spain to the United States in 1898, a teachers' retiring system was in operation, having been established by the Cortes in 1894. The fund was constituted by a three per cent contribution on teachers' salaries, and by a ten per cent discount on all school supplies purchased by the government, together with the teacher's full salary while a school was vacant. The island government also granted annually 3000 *pesos* to the fund. At the time of the American occupation the retirement fund amounted to 35,000 *pesos*, but it was carried off by the Spanish officials when they returned to Europe. The American school law that went into operation upon the occupation was not so enlightened with regard to teachers' pensions as the law that it superseded. The retirement fund continued, but was reduced to a voluntary pension system incapable of curing the evils that pensions are designed to remedy. This system was abolished on March 9, 1905.

It is not possible to give complete details of all the pension systems in operation in American cities, but the following description of a few of the more important will indicate the number of teachers affected, and the nature of the act and of the benefits of the pension systems thus established.

NEW YORK CITY

The Teachers' Retirement Fund of New York City was established for the old city in 1894 and for Brooklyn in 1895. After 1898 both funds received five per cent of the excise money of their respective cities. The funds were consolidated in 1902, and are now administered under a law passed in 1905. The Board of Education establishes the rules for the administration of the fund, and the comptroller of the city holds and invests the moneys. These are composed of five per cent annually of all excise money or license money belonging to the city, of a one per cent contribution from the salaries of all members of the teaching and supervising staff, and of pay forfeited or withheld for any cause from the members of the teaching or supervising staff. This last source of revenue consists almost wholly of deductions of pay on account of absence.

In the former city of New York a teacher physically or mentally incapacitated was eligible for retirement, if a man, after thirty-five years of service in New York schools, and if a woman, after thirty years of such service. In Brooklyn a male teacher

sixty years of age, or a woman teacher sixty-five years of age, was entitled to retirement after thirty years of service, the last twenty of which must have been in the Brooklyn schools. In the present system the necessity for physical or mental disability does not exist, and the board of education may retire any teacher who has attained the age of sixty-five years after being engaged in school work for thirty years. On the recommendation of the board of retirement, the board of education, by a two-thirds vote of all of its members, may retire any teacher whose period of service is thirty years, fifteen of which have been in the New York school system; and in the same way the board of education may retire any teacher who is mentally or physically incapacitated who has served for a period of twenty years, fifteen of which have been in the New York public school system. In 1911 a compulsory retirement at the age of seventy was added to the rules by the board of education. The board of retirement is constituted of the president of the board of education, the chairman of the committees on elementary and high schools of the board, the city superintendent of schools, and three other members elected from their own body by the principals and teachers of the public schools. It is the custom of the board of education to approve all of the recommendations of the board of retirement. The annuity after thirty years of service is one-half of the annual salary at the date of retirement, no annuity being less than \$600 and none more than \$1500, except for supervising officials, for whom the limit is \$2000. Annuities after less than thirty years of service are calculated proportionately.

The law provides that there shall be reserved a permanent fund of \$800,000, and that the number of persons retired in any one year shall be so limited that the entire amount of the annuity to be paid for that year shall not be in excess of the estimated amount of the retirement fund applicable to the payment of annuities for that year. The fund on January 1, 1912, including a sum of \$200,000 arising from excise in the year 1912, but which, according to custom, is credited to the previous year, stands at \$1,427,825.52. This amount was composed as follows: deductions for absence, \$255,464.17; contributions from salaries, \$215,158.45; excise taxes, \$491,803.16; interest on investments, \$39,428.57; interest on bank balances, \$1808.10; the rest being from balances in the fund. Three hundred and seven persons were retired during the year 1912 or recommended for retirement in February, 1913. The number of annuitants on the rolls on January 1, 1913, was 1375, and the total annuity load on January 1, 1913, was \$991,343.98, an increase over the disbursements of 1911 of \$110,954.15. The disbursements exceeded the receipts by \$48,142 in 1910, and by \$77,337 in 1911. Unless further income is provided, the surplus of \$627,825.52, over the \$800,000 which must remain as an endowment, will disappear, and the annuities granted will have to be limited to the interest from that amount and the accretions for the year. In 1910 28 per cent of those on the roll retired for disability, after an average service of about twenty-five years. Practically all of the others were retired on the basis of something between thirty and forty years of service; 94

per cent are women. In proportion to their numbers on the active staff, twice as many women as men take advantage of the annuities. The average payment to the men annuitants is about double that to the women. The average amount contributed to the fund by the men is double that of the average woman. The men as a whole contribute more than is paid to men annuitants. The annuities paid to the women require all their contributions and a sum from the surplus.

BOSTON

In the city of Boston there was organized in 1889 the Boston Teachers' Mutual Benefit Association. In 1900 the legislature of Massachusetts took cognizance of the work of this association by authorizing the establishment of the Boston Teachers' Retirement Fund. In 1906 the school committee of Boston made a study of the question of teachers' pensions, and in 1908 the legislature directed the school committee to levy five cents upon each \$1000 worth of taxable value in order to provide teachers' annuities, which were not, however, to exceed \$180. The legislature of 1910 changed this latter provision by authorizing annuities of not less than \$312 and not more than \$600.

As the law now stands, there is a board of trustees of the Boston Teachers' Retirement Fund consisting of the superintendent of public schools of Boston *ex-officio*, four members of the school committee of Boston, elected by the committee for the term of two years, two retiring each year, and three female teachers and three male teachers elected by the teachers for the term of three years, one male teacher and one female teacher retiring each year. The care and investment of the funds is in the hands of a board consisting of the chairman of the board of commissioners of the sinking fund of Boston, of a member elected by the school committee, and of a member elected by the board of trustees of the Teachers' Retirement Fund, the terms of office being five years each.

The pensions are paid entirely from the levy of five cents upon each \$1000 worth of taxable value, the total amount of the annuities in any year not to exceed the sum produced by this levy together with the accrued interest of the permanent fund. In case of a deficiency all existing pensions are to be pro-rated, except that in no case is the annuity to be paid to a teacher who has retired after thirty years of service to be less than \$312.

The school committee of Boston, by a majority vote of all members, may retire any teacher sixty-five years of age who, in the opinion of the committee, is incapacitated for further service, provided the teacher's period of service in public schools is thirty years, ten of them in the employ of the school committee of Boston. The annuity is one-third of the annual salary at the period of retirement within the minimum or maximum limits. If the teaching service has been less than thirty years, a pro rata annuity is to be granted. The school committee was also directed to pay

sixty annuities to the annuitants of the Boston Teachers' Retirement Association on the rolls of that association when the act of 1909 took effect, the committee to select the sixty senior annuitants, and to keep up the payment to sixty annuitants till all those so situated had received pensions.

In 1909 the sum available for pensions was \$65,043. In 1910, \$66,194, and in 1911, \$67,770. In 1910 the total number of annuities, including the sixty from the Boston Teachers' Retirement Association, was 169, and the total amount of their annuities was \$52,000.

PHILADELPHIA

Mr. Lewis Elkin, of Philadelphia, who died in 1901, left a million dollars to the city of Philadelphia to provide annuities of \$400 apiece to disabled female teachers of the public schools of Philadelphia who have "no means of support." The board of education of Philadelphia has interpreted this to mean no adequate or no sufficient support, and has limited the participation to all applicants otherwise eligible whose income does not exceed \$300 a year. In 1912 the income of the Elkin Fund, which has since its creation been increased by a legacy from Mrs. Elkin, permitted the payment of 192 annuities.

The board of public education of Philadelphia adopted on November 13, 1906, under the authority of the general school law of 1905, a plan for a teachers' retirement fund.

The fund is administered by a board of retirement consisting of the president of the board of public education of Philadelphia *ex-officio*, two members of the board appointed by the president, one member of the department of superintendence elected by the contributing teachers for the term of two years, and one teacher not a member of the department of superintendence elected for the term of two years, on alternate years from the previous member.

The membership is compulsory upon all entering the public school service since the inception of the fund. Under the contributing feature are levied contributions of one per cent on those in the first ten years of service in the Philadelphia public schools, and contributions of two per cent on those whose service is over ten years. The maximum contribution annually is \$50. The city of Philadelphia is to appropriate, if possible, an amount equal to the total contributions of teachers, but such appropriation is not to be less than \$50,000 a year.

Annuities are granted to teachers after thirty years of service, twenty of which shall have been in the public schools of Philadelphia, the annuity to be one-half of the annual salary at the time of retirement, but not to be less than \$400 and not to exceed \$800 unless the retirement board after a year's experience, finding its fund sufficient, raises the maximum to \$1000. Pro rata pensions for disability after five years of service in the public schools of Philadelphia can be granted at the discretion of the retirement board. No teacher is to be retired who has not contributed an amount

equal to twenty-five regular annual contributions, to be calculated as at the time of retirement. The retirement board may in its discretion distribute this amount over a term of years by deductions from annuities. In case of insufficiency of funds, all pensions are to be pro-rated. The plan may be amended by joint vote by the board of education of Philadelphia, and of two-thirds of the contributing teachers.

The plan was to go into effect when 2000 teachers had signified their intention of joining. By January 1, 1907, 3900 teachers had joined, and the fund therefore began. All except about 25 teachers in the Philadelphia public schools now belong.

A comparative financial statement for the first six years of operation follows:

Years	Appropriated by City	From Teachers				Total Receipts	Number of Retirements	Annuity Payments
		Contributions	Cash Paid-up Liabilities	Deduction from Annuities	Total from Teachers			
1907	\$50,000	\$58,103	\$5,543	\$4,509	\$68,156	\$130,780	50	\$10,476
1908	50,000	60,035	3,699	14,694	78,430	136,443	55	36,850
1909	50,000	62,220	6,083	12,698	81,002	143,855	43	50,325
1910	50,000	64,561	5,543	10,282	80,386	146,734	29	63,694
1911	50,000	67,058	3,667	10,621	81,346	150,563	38	76,475
1912	50,000	70,000 ¹	3,802	6,702	80,504 ¹	152,000 ¹	37	86,650 ¹

DETROIT

The city of Detroit has a teachers' retirement fund established by the legislature of Michigan in 1895.

The fund is managed by a board of trustees under the law of 1901, consisting of the superintendent of schools of Detroit *ex-officio*, three certain designated officials of the board of education, and three members elected by the teachers for the term of three years, one each year.

By the Michigan law the Detroit board of education can arrange for a schedule of contributions of from one to three per cent, no annual contribution, however, to be based on more than \$1000 of salary. The board can also use the absence fees for the fund. The interest on daily balances of the teachers' salary fund in Detroit and the tuition fees of non-resident pupils in the public schools are added to the permanent fund. Teachers of thirty years' service in public schools, twenty years of which have been in Detroit, and also teachers of twenty-five years' service in Detroit alone are entitled to annuities. The board may also grant at its discretion annuities to teachers of twenty-five years' service in the public schools, fifteen years of which have been in Detroit, and by a two-thirds vote of the board disability pensions are allowed after twenty years' service, ten years of which have been in Detroit.

All annuities are now fixed by the board at \$330 a year, and there are 66 names on the roll. In 1911 the permanent fund amounted to \$90,000.

¹Estimated.

SAN FRANCISCO

The city of San Francisco has a teachers' retirement system, the permanent funds of which amount to \$50,000. In 1912 the contributions by teachers amounted to \$13,404, and the absence fees granted by the board of education were \$3000. The annuities equaled \$41,400 to 74 annuitants, in sums ranging from \$300 to \$600 a year, but owing to the insufficiency of funds, only fifty per cent of these granted amounts are being paid.

INDUSTRIAL PENSIONS

In the field of industry many prominent corporations have instituted pension systems for their employees; the last two or three years especially have been prolific in the announcement of such enterprises. Even yet, however, only a very inconsiderable proportion of the industrial establishments of the United States make any provision for the old age of their workers.

In the field of transportation the situation is better, especially among railroad companies. The Pennsylvania Railroad System, the Baltimore and Ohio Railroad, the Chicago and Northwestern Railroad, the Illinois Central Railroad, the Delaware, Lackawanna and Western Railroad, the Philadelphia and Reading Railroad, the Union Pacific Railroad, the Southern Pacific Railroad, the Atlantic Coast Line Railroad, the Rock Island Lines, the Atchison, Topeka and Santa Fe Railroad, the New York Central Lines, the Chicago, St. Paul, Minneapolis and Omaha Railroad, the Buffalo, Rochester and Pittsburgh Railroad, the Minneapolis, St. Paul and Sault Ste. Marie Railroad, and the San Antonio and Aransas Pass Railroad, all conduct pension systems. These roads represent a considerable proportion of the railroad mileage of the United States. In the Dominion of Canada pension systems are maintained by the Canadian Pacific Railroad and the Grand Trunk Railway System.

All of these railroad pension systems are financed entirely by the companies, and all provide for retirement at some period in the sixties, but in every case the pensions are small. The Buffalo, Rochester and Pittsburgh Railroad pension is two per cent for each year of service of the average wages of the employee during his last ten years of service; the Atchison, Topeka and Santa Fe Railroad pension is one and a quarter per cent. All of the other railroads grant a pension of one per cent for each year of service of the average salary for the last ten years. This is also the plan of the Old Dominion Steamship Company. The New York Central provides that if the pension demands exceed \$225,000 a year, a new basis of computation may be established. It will thus be seen that the characteristic marks of the American railroad pensions are: first, that the burden falls entirely upon the employing corporation; and, second, that the pensions are very small. In England the railroad pension systems, some of which have been in existence for half a century, are contributory.

Some of the street railway companies of the United States, such as the Brooklyn Rapid Transit Company, the Boston Elevated Railway Company, and the Philadel-

phia Rapid Transit Company, have instituted pension systems for their employees similar to those in force in steam railroad systems. But the street railroads that have done so are yet only a small proportion of our electric transportation lines.

In manufacturing, notwithstanding that numerous corporations conduct pension systems of some kind for the benefit of their employees, only a beginning has as yet been made. Every year, however, shows a large increase in the number of these corporations, and a wider acceptance of the principle that some method of caring for those grown old in the service of a corporation is an obligation that must not be evaded. A few of the pension plans in industrial corporations may be mentioned by way of illustration.

One of the largest and most comprehensive pension systems in the industrial world was announced on January 1, 1913, by the American Telephone and Telegraph Company to become effective on that day. The American Telephone and Telegraph Company controls practically all the stock of the various telephone companies throughout the United States using the Bell system, and also of the Western Electric Company, a corporation engaged in manufacturing cable and telephone supplies. It is the largest single stockholder in the Western Union Telegraph Company. The pension system will cover all of these companies. It will therefore affect upwards of 175,000 employees.

The Bell telephone system throughout the United States is composed of the individual telephone companies whose stock is owned by the American Telephone and Telegraph Company, and these separate companies are grouped in districts such as the District of New England, of the Central Atlantic States, etc. In each one of these districts, in which the telephone companies are generally managed more or less in common, there will be a pension board composed of certain officers of the companies with a secretary. The Western Union Telegraph Company will also have a similar board of its own, and so will the Western Electric Company. The board for the telephone companies of the Central Atlantic States, whose employees number 40,000, is already instaled in quarters and has begun its work.

The American Telephone and Telegraph Company itself will also have a pension board. This board will have a two-fold function: on the one hand it will act as a direct pension board for the 4000 employees of the company who work in the executive offices in New York and who operate the long distance telephone lines throughout the country, and also it will act as a sort of "Court of Cassation" over the pension boards of the Western Union and Western Electric Companies, and of the pension boards of the district groups of telephone companies. This superior board consists at present of the comptroller, the two vice-presidents, the general counsel, and the acting treasurer of the American Telephone and Telegraph Company. It has already begun that part of its work which deals with the immediate employees of the holding company; its appellate jurisdiction has not yet had time to develop.

The pension system of all the companies is similar. It consists of three parts: annuities, life insurance, and sickness and accident disabilities.

Annuities are to be granted at their own request to all male employees sixty years of age, and to female employees fifty-five years of age, who have served twenty years. Male employees of fifty-five years of age who have served thirty years, and female employees of fifty years of age who have served twenty-five years, may be retired upon the approval of the president or designated vice-president. The pension is to be one per cent for each year of service of the average pay during the last ten years of service, a minimum being fixed at \$20 a month. The pension committee may in its discretion base the computation of annuity upon the average pay for any ten consecutive years which may be higher than the pay of the last ten years of service.

The life insurance provision is a grant of six months' full wages when the employee's period of service has been greater than five years but less than ten, and a grant of one year's full wages when the term of employment has been greater than ten years; maximum payment in any case to be \$2000. If, however, the employee's death was due to an accident occurring in the performance of work for the company, the insurance shall amount to three years' full wages, but shall not exceed \$5000. A sum not exceeding \$200 may be advanced immediately by the pension committee to meet funeral expenses, or other urgent expenses incident to the illness and death of the employee.

The disability payments are divided into two classes, sickness and accident. The sickness payments consist of full pay for four weeks and half pay for ten weeks when the employee has served more than two years and less than five; full pay for thirteen weeks and half pay for thirteen weeks when the employee has served more than five years and less than ten; and full pay for thirteen weeks and half pay for thirty-nine weeks when the employee has served more than ten years. The accident disabilities cover accidental injury during employment while in the performance of work for the company, and payment consists of full pay for thirteen weeks and half pay for the remainder of the period of the continuance of the disability, not exceeding six years in all. The pension committee will also attend to all necessary surgical treatment.

This pension system is supported entirely by the group of companies associated with the American Telephone and Telegraph Company as enumerated above. There are no contributory features. To support it, \$10,000,000 was credited to the fund on January 1, 1913, which will draw interest at four per cent. The associated companies promise at the termination of each year to add such a sum, not to exceed two per cent of their aggregate payroll, as will be necessary to replenish the fund up to the amount of \$10,000,000. It is estimated by the officials of the American Telephone and Telegraph Company after an actuarial study of card records for all the 175,000 employees affected, and from a comparison of other American industrial pension systems, that less than the two per cent of the payroll will always carry this pension system. One important element in this calculation is the fact that 60,000 of

the employees are telephone operators, of whom 50,000 are girls. The average length of service of the operators is only about three years, so that they will never become annuitants, although it is expected that the existence of this pension system may have a tendency to lengthen this short period of average service.

The United States Steel Corporation, the International Harvester Company, the American Sugar Refining Company, the American Express Company, the Gorham Manufacturing Company, Wells Fargo and Company, and the Westinghouse Air Brake Company have pension systems in which the cost is borne by the employer. The United States Steel Corporation and Mr. Carnegie united in March, 1901, in establishing a pension fund for the steel employees, the corporation contributing \$8,000,000 and Mr. Carnegie \$4,000,000. The American Sugar Refining Company has provided \$300,000 for its pension fund. The Gorham Manufacturing Company has established a pension reserve by appropriating each year a sum equal to one per cent of its labor cost. The Westinghouse Air Brake Company inaugurated its pension plan in 1908 with an appropriation of \$110,000, with an authorization of \$10,000 annually for pensions for the current year. All of these plans, except that of the American Sugar Refining Company, contain provisions for rescaling the pensions. The United States Steel Corporation rules provide that if the annual income on its \$12,000,000 principal is exceeded by the demands, the board of trustees of the fund, after exhausting any surplus that may have accumulated, may adopt a new basis not only for prospective pensions, but for those already granted. The International Harvester Company will fix a new rate for pensions, if their aggregate exceeds \$100,000 a year, unless the company makes additional appropriations. The Gorham Manufacturing Company announces that if for three consecutive years the pensions exceed by five per cent the appropriation into the reserve fund, all outstanding pensions will be cut down so that the total amount may come within the average of the three years' appropriation, and a new rate will be adopted for the future. Wells Fargo and Company and the Westinghouse Air Brake Company merely provide that if the pensions exceed the resources, all pensions may be reduced proportionately. The amount of the pension in almost all of these companies is one per cent for each year of service, based upon the average salary for the last ten years. The Steel and Harvester corporations also have a maximum of \$1200 a year, the Gorham Company of \$1000; the Steel and Harvester companies permit earlier retirement to women than to men. Some of these corporations have an objectionable rule permitting the authorities to withdraw a pension at any time at their own discretion. Altho this power will be rarely exercised, it takes away the sense of security, and opens the door for an arbitrary exercise of power.

Examples of contributory pensions in industrial establishments are afforded by the meat-packing corporations of Armour and Company, and Morris and Company. In Armour and Company the contribution is three per cent of all salaries, and the company obligates itself to contribute eventually \$1,000,000 to the fund, and to

maintain the treasury at that amount. The pension is two per cent of the salary at the time of retirement for each year of continuous service. If an employee dies during any period of his service, his widow receives one per cent of his last salary for each year that he served. If he leaves no widow, this amount is divided between his children under eighteen years of age until they reach that age. When a pensioner dies his widow and his children under eighteen years of age are entitled to one-half of his pension.

If an employee leaves the service of Armour and Company voluntarily, he receives back the total amount of his contributions, but without interest; if he is discharged, he receives back his contributions with interest at four per cent compounded semi-annually.

The pension system of Morris and Company is provided for by a sum of \$25,000 set aside annually by the company until the fund shall reach a total of half a million dollars, and by a contribution of three per cent of the salaries of all employees whose weekly wages exceed ten dollars. The pensions begin at the age of fifty-five, after twenty consecutive years of service, and are two per cent for each year in the employ of the company. Any person compelled to retire because of disability before the age of fifty-five receives his pension pro-rated, and in case of the voluntary retirement of any employee before his having earned a pension, he receives his total contributions back, but without interest. A widow is entitled to one-half of her husband's pension, no matter after how short a period of service he may have died, but the pension ceases in case of re-marriage. In case of the widow's re-marriage or death, however, any children under eighteen years of age will receive the widow's portion until that age is attained.

An interesting and wise provision of the pension system of Morris and Company, on account of its contributory feature, is the method of administration. Instead of the management of the fund being in the control of a board appointed entirely by the employing corporation, this fund is administered by a committee of five, only two of whom are appointed by the company, the remaining three being elected by ballot by the employees: a cumulative system of voting, based upon length of service, being used.

CIVIL SERVICE PENSIONS IN NEW SOUTH WALES

THE difficulty of maintaining a pension system from an estimated income is very serious. Even with the best actuarial study, the conditions of the future are difficult to forecast. All groups for which pensions are available show a curious liability to grow in size. The death rates fail to follow the anticipated law. Any pension system administered from a fixed income and unprovided with a source from which its income may be increased is bound in time to come to a point where the calls upon it under its

own rules exceed its income. A most illuminating instance of this sort of well-meant effort is found in the experience of New South Wales.

In 1884 the Parliament of that colony established a "Civil Service Superannuation Account," to which all civil servants, with the exception of certain minor employees, were required to contribute four per cent of their salaries, and to which the government of the colony promised an annual grant of £3500, with an additional annual grant of £20,000 for the first five years. Retirement was permitted at the age of sixty, after fifteen years of service, and for disability after the same period of service. The amount of the allowance for the first fifteen years of service was to be fifteen-sixtieths of the average salary for the last three years, to be increased by one-sixtieth for each additional year of service, but no allowance was to exceed two-thirds of the average salary specified. Those whose services to the colony were dispensed with, except for misconduct, were to receive one month's pay for each year of service. Two months' pay for each year of service was to be paid to those who were incapacitated in the discharge of their duties, and who had not served fifteen years. A widow also, or children under sixteen years of age, who might be left in necessitous circumstances, were to receive a gratuity not to exceed six months of the deceased officer's last salary.

It was provided in the act creating the fund that there should be an actuarial investigation by skilled accountants every three years. The first investigation was held in 1887, Mr. Richard Teece, secretary of the Australian Mutual Provident Society, being designated by the Civil Service Board as actuary. Mr. Teece's careful and elaborate report seriously impugned the solvency of the fund. After pointing out the fact that tables of the rates of retirement in various services are exceedingly scarce, but that such as are available disclose that experience among one body of men cannot safely be assumed to obtain among another body surrounded by different circumstances, he enumerated the specific causes leading to the critical condition of the fund. First, the four per cent contribution would be inadequate. This rate was sufficient only in the case of an employee entering the service at the age of twenty-five; at thirty the contribution should be five per cent; at thirty-five years, six per cent; at forty years, seven and a half per cent, and so on. Secondly, there was no sufficient provision for the accrued liabilities assumed by the fund at its inception. Even if the four per cent contributions had been sufficient to keep the system going, they would have been insufficient to carry in addition the pensions granted for services that were rendered before the contributions began. Nor was the government subsidy sufficient to make up this deficiency. There was a third difficulty of a political character. The act of 1884 provided that if an office were abolished, its holder could be retired upon the superannuation account at any age, and a scheme of retrenchment adopted by the government in 1887 added many beneficiaries to the fund in this way. Finally, the actuary regarded the gratuities to widows and orphans of deceased employees as quite out of place in a superannuation fund.

The Civil Service Board received the actuary's report with skepticism. Indeed, in

spite of it, they recommended that the gratuities to widows and orphans be extended in order to relieve the board from the necessity of making invidious distinctions. The board paid no attention to the recommendations that the rate of the pensions be reduced by basing them upon the average salary for the entire period of service, and that the government grant £50,000 to enable the fund to assume the accrued liabilities.

When the period for the second triennial investigation arrived in 1890, the Civil Service Board appointed its own actuary, Mr. John B. Trivett, to make the examination. Mr. Trivett found the conditions indicated by Mr. Teece both intensified and more distinct; he found the same reasons for the insolvency of the fund, and made about the same recommendations as the former actuary. The pensioners had increased from 174 three years before to 419. The new actuary did not believe it practicable to increase the rate of contribution beyond four per cent, as an increase would press too severely upon the recipients of the smaller salaries. He thought, however, that considerable improvement would result from basing the retiring rate upon the average salary during the entire period of service, and also considered this as more equitable: "Since the receipts from each officer are proportionate to the amount of salary year by year throughout his official life, it is but just that the basis upon which the retiring allowance is computed should have a relation to his total emoluments, and not depend upon the advantages nor the vicissitudes which might befall him during the last three years of service." Mr. Trivett ended by recommending an immediate government grant of £60,000 to the fund. He also recommended a comprehensive collection of data from the civil service, in order to separate the accrued liabilities assumed at the creation of the fund from the continuing liabilities.

This time the Civil Service Board was more inclined to listen to the report of its actuary. It recommended to the governor of New South Wales that there be a limitation as to the age of persons allowed to enter as contributors to the fund; that no retirements be allowed under sixty years of age, except under very rigid regulations; that retiring allowances due to government retrenchment be not made a charge upon the fund; and that the government assist the fund with a sufficient annual grant. The board now recommended, instead of gratuities to widows and orphans in necessitous circumstances, that in every case a certain fixed proportion of the officer's contribution be returned to his widow and children. But the board, while admitting "that the fund is insolvent from an actuarial point of view," maintained that "a reconstruction of the act will bring the fund, in the course of a few years, into a solvent condition." No legislation was effected, however, and a general feeling of apprehension arose throughout the civil service of the colony as to the state of the superannuation account.

By the time that the period for the third triennial investigation of the fund drew near, the statement for 1893 showed that the four per cent contributions for that year amounted to £67,308, while the allowances and gratuities were equal to £75,262. The Civil Service Board therefore secured the services of Mr. T. A. Coghlan, gov-

ernment statistician of New South Wales, now the Agent-General of that colony in London, for a very complete examination.

Mr. Coghlan's report was even more forcible than that of his predecessors. He complained that the preceding reports had received far less attention than they deserved. He undertook the great labor of collecting the data that Mr. Trivett had so strongly recommended three years before, thus placing the investigation upon a far sounder footing, but unfortunately making the condition of the fund assume a still more unfavorable aspect.

The object of the act of 1884 was to secure pensions to civil servants upon their retirement, and to this end, to establish a fund that would eventually be self-supporting. This object was to be achieved by payments from the treasury for a limited number of years, and contributions by the civil servants of a fixed percentage of their salaries. Mr. Coghlan found this plan perfectly feasible: had the fund originally been established on a solvent basis with a clear knowledge of the liabilities involved, had the promised benefits been put on a scale proportionate to the price paid for them, and had no charge been put upon the fund beyond the original plan. All three of these conditions, however, had been violated, with the result that at the time of the investigation the fund had a deficiency of nearly £3,000,000, increasing at the rate of £120,000 a year, a condition too serious to be remedied even by the assistance of the government.

The remedy recommended by Mr. Coghlan was startling, being no less than the scaling down of all pensions, existing and prospective, 65 per cent. As an alternative he suggested the following changes in the act of 1884: that the pension age be raised from sixty years to sixty-five years and strictly confined to that; that no person be admitted thereafter as a contributor who was above the age of thirty-five years unless he pay back contributions as from that date, with compound interest of four per cent; that pensions be computed on the average salary for the last seven years; and that all gratuities be abolished. Even if these changes were made, there was no hope that the fund would become solvent, but that it would be brought within such a reasonable distance of solvency that the government would find it practicable to restore its solvency by a special grant.

The confirmation by Mr. Coghlan of the report of the two previous actuaries finally convinced the Civil Service Board of the insolvency of the fund, and of the essential unsoundness of the act of 1884. The board naturally laid strong emphasis upon the unfortunate position of those employees who had been contributing for years to the fund in confident expectation of laying up security for their old age, and recommended their case urgently to the consideration of Parliament.

Parliament decided that it could not in good morals reduce the retiring allowances 65 per cent, as that would be a virtual repudiation of its contract. On the other hand, it was not willing to order the radical reconstruction of the fund, which was the actuary's other alternative. Nothing remained, therefore, but to take steps to terminate the fund, and this policy was entered upon by the act of 1895.

By this act the option was offered to the contributors to discontinue their contributions to the fund. Those ceasing to contribute were to receive back the total of their previous contributions, with three per cent interest, upon their retirement from the service of the colony, or their estates were to receive the same amount in the event of their death. Instead of an annuity they would receive a gratuity equal to one month's salary for each year of service, calculated upon the average salary for the entire period of service. The government assumed the liability for these gratuities.

Civil servants who elected to continue their contributions were to receive a pension as hitherto, but no new entrants into the fund were to be permitted. The fund would thus expire upon the death of the last of the existing civil service force. New servants of the state were to be compelled to insure their lives under certain conditions.

As the fund still existed, the actuarial investigation required by the act of 1884 continued obligatory, and a fourth investigation was made in 1898 by Mr. Trivett, who made the second investigation. He found the situation improved by the reforms that followed the last examination, but the deficiency was still large. Out of 9593 former contributors, 5829 had elected to cease contributing, but these were the younger employees. Those near retirement naturally kept up their payments, and so the retiring load upon the fund showed scarcely any diminution, nor was it likely to do so for a number of years. It was evident that with the annual contributions reduced from £67,000 to £21,000, and the load of pensions continuing the same, the time would arrive when the fund would not only be insolvent, but resourceless.

In 1901 the last actuarial investigation was made, again by Mr. Trivett. The assets had dwindled to a low figure. The actuary discussed the history of the fund, and laid down a series of principles upon which he believed that a self-sustaining contributory retiring allowance system could be maintained. Assuming the age of retirement to be sixty years, and assuming also a progression in salaries similar to that then existing in the New South Wales civil service, he advised the following contributory rates :

Under 20 years	5 per cent
Over 20 and under 25 years	5½ per cent
Over 25 and under 30 years	5¾ per cent
Over 30 and under 35 years	6 per cent
Over 35 and under 40 years	6½ per cent

Mr. Trivett added the hope that the failure of the act of 1884 would not discourage Parliament from undertaking to frame an adequate superannuation plan. The need for it continued as imperative as ever, for the insurance ordered by Parliament to be taken out by new entrants into the civil service would amount in the case of the average officer to only £200 (\$973), a sum utterly inadequate under any method of management to act as the principal necessary to provide retired officers with a living income.

In 1903 the long expected disaster arrived: the superannuation account had no funds left in its treasury. Over £1,100,000 had been contributed to it during its

existence, but it was all gone. The government then did the only thing possible, —assumed the entire responsibility for existing pensions and those that continuing contributors will expect under the rules in force, — and now Parliament annually makes appropriations for these pensions along with the other current expenses of the state. It is calculated that in 1936 this drain upon the state treasury will have ceased finally.

The failure of the New South Wales plan was a misfortune to the state, since it gave a serious blow to all systems of pensions. The real ground of criticism of the New South Wales Civil Service Board, which administered the system, does not lie in the original mistake. In the early days of so new and complex a problem, of which so little is known, it is no detraction to the authority in charge to change plans radically in the light of experience. This the board should have done on the basis of the report made at the end of the first actuarial period. Doubtless the decision to do this was rendered more difficult by the fact that the system was a contributory one. Under such circumstances no plan could be fairly adopted which did not contemplate the return of money paid in by contributors with a reasonable interest thereon.

The government of New South Wales could not acquiesce permanently in a condition in which the only provision for superannuation in the civil service was the inadequate compulsory insurance upon entrance. A commission was authorized by Parliament to investigate the entire subject, three of the six members to be actuaries. This commission made a report in 1912, which is one of the most valuable contributions to the literature of pensions.

The commission presented cogently three reasons for civil service pensions:
↓ A civil service without a pension scheme will in the long run fail to attract the kind of ability it needs most urgently. The normal scale of official emoluments, particularly in responsible positions, is not sufficient to induce able and energetic men to give up the chance of the larger earnings possible in the field of private enterprise. The state cannot offer the prospect of wealth to its servants, and therefore must be able to assure them reasonable security against poverty in old age. ✓

The state must be able to retire officials who have grown too old for their work. But if the civil servant knew that he would be retired at sixty without means of subsistence, competent men would seek other employment, unless the state offered them salaries so large that they could afford to insure themselves against old age. If this plan were followed, the profits of insurance would accrue to private corporations. A pension system simply means that the state provides the insurance and saves the profits for itself. The establishment of a proper pension system, therefore, so far from being an extravagance, really is a most important measure of public economy. It is a means of attracting good men, and it enables the state to dispense with servants who are past their usefulness, and to quicken the promotion of younger men.

The average civil servant, cut off as he is from the business community, cannot hope by means of insurance or by prudent investment of small savings to provide

against incapacity and premature death. Misfortunes frequently come when the family is young and most in need of the chief wage-earner's support. The widows of deceased employees or the wives of employees who had become incapacitated would then be forced to seek employment, probably as cleaners, caretakers, etc., or if the children could not be left to themselves, the mothers would drift into one or another of the sweated "home industries." In numerous cases the state would have to come to the assistance of the family, and its help would usually take the form of charity—perhaps the worst of all forms of help.

The commission framed a pension plan which would include the entire government service of New South Wales, not only the Crown employees, but shire and municipal employees as well.

The objections to separate schemes for different sections of the government service are the greater expense of management, and the fact that the "experience" of a fund with a large number of contributors is less open to accidental sectional or occupational fluctuations than is a smaller "experience." Consequently an inclusive government system furnishes a sounder basis for estimating the cost of providing pension benefits.

Furthermore, the commission regarded the civil service pensions as the first instalment of social insurance, and attempted to devise a plan of superannuation which would lend itself readily to extension to other classes in the community.

The basis of the system proposed by the commission is not the individual, but the family. In many other pension schemes the pension usually lapses with the death of the contributor or pensioner. The commission makes provision for the widow and children.

The basis of the contributions, both by the contributors and the government, is a relation to the amount of pension rights in prospect, and this, in turn, depends upon the amount of salary. If contributions are a percentage upon salaries, without regard to the amount of pension for which such contributions are a payment, notwithstanding the prospective pension and the contribution increase as a man rises in the service, the increase of pension bears no relation to the increased contribution and is not dependent upon it. The younger men pay more than the benefits receivable and the older men pay less. Each employee should, on the average, pay for the benefits he will receive, subject to such reductions by assistance from his employer, the state, as the law shall provide; the burdens of one section of the service not being lightened at the expense of any other section.

The bill offered to Parliament by the commission provides the following proposed benefits:

1. Full pension on retirement in case of a man at the age of sixty after ten years' service, and in case of a woman at the age of fifty-five or of sixty, according to the table she has elected to contribute under. An actuarially reduced pension to an employee who elects to retire after thirty-five years' service before reaching the age of sixty.

2. Upon the death of a pensioner, one-half of his pension to be paid to his widow, and £13 a year for each child under sixteen.

3. Upon the death of a contributor before the age of retirement, one-half of the pension for which he was contributing to be paid to his widow, and £13 a year for each child under sixteen.

4. Upon retirement, after ten years' service, of a contributor on account of invalidity or incapacity not due to his own fault, a full pension to him, and upon his death one-half of his pension to be paid to his widow, and £13 a year for each child under sixteen.

5. Upon retirement, after ten years' service, of a contributor on account of invalidity or incapacity due to his own fault, a pension the actuarial equivalent of the contributions made by himself and by his employer in respect of him up to the time of retirement. Upon the death of such a contributor, one-half of such pension or £26 a year (whichever is greater) to be paid to his widow, and £13 a year for each child under sixteen.

6. Upon resignation or dismissal of a contributor before the age of sixty, his total contributions to be refunded.

7. Upon termination of a contributor's service on account of retrenchment by the government,

(a) a pension the actuarial equivalent of the contributions made by the employee and by the government in respect of him; or

(b) a payment equivalent to twice the amount of his contributions.

To support this system of pensions, the contributions are to be assessed equally upon the employee and the government.

The basis of the employee's contribution is the unit of pension. A unit of pension is £26 a year, and the minimum pension for which an employee can contribute is two units, or £52 a year.

The units of pension for which an employee must contribute increase automatically with his salary until a maximum amount of £312 pension a year is reached, according to the following table:

<i>Salary</i>	<i>Pension Units to be provided</i>	
£	Units	£
Up to 130	2	52
130 to 156	2½	65
157 to 208	3	78
209 to 260	4	104
261 to 312	5	130
313 to 364	6	156
365 to 416	7	182
417 to 468	8	208
469 to 520	9	234
521 to 572	10	260
573 to 624	11	286
625 and over	12	312

If an employee's salary is increased after the age of forty, it will not be compulsory upon him to contribute for additional units of pension.

An employee may elect to contribute for such number of units of pension as is prescribed for the salary group next higher than that to which he belongs according to the above table; the employer in such cases contributing in accordance with the like number of units.

The following table gives the bi-monthly contribution at different ages for men for a pension of £52 a year, carrying rights to widows and to children under sixteen. The difference in rates between the first two units of pension and any subsequent two units is that the first two units carry the orphans' benefits.

BI-MONTHLY CONTRIBUTIONS

Age	1st £52 per annum			2d and subsequent £52 per annum		
	£	s.	d.	£	s.	d.
16	0	2	6	0	2	2
17	0	2	8	0	2	4
18	0	2	10	0	2	6
19	0	3	0	0	2	8
20	0	3	2	0	2	10
21	0	3	5	0	3	0
22	0	3	8	0	3	3
23	0	3	11	0	3	6
24	0	4	2	0	3	8
25	0	4	5	0	3	11
26	0	4	8	0	4	2
27	0	4	11	0	4	5
28	0	5	2	0	4	7
29	0	5	6	0	4	11
30	0	5	9	0	5	2
31	0	6	1	0	5	6
32	0	6	4	0	5	9
33	0	6	9	0	6	1
34	0	7	1	0	6	5
35	0	7	6	0	6	10
36	0	7	10	0	7	2
37	0	8	4	0	7	8
38	0	8	10	0	8	2
39	0	9	4	0	8	7
40	0	9	11	0	9	2
41	0	10	6	0	9	9
42	0	11	3	0	10	6
43	0	12	0	0	11	3
44	0	12	11	0	12	2
45	0	13	11	0	13	3
46	0	15	1	0	14	4
47	0	16	5	0	15	8

<i>Age</i>	<i>1st £52 per annum</i>	<i>2d and subsequent £52 per annum</i>
48	0 18 0	0 17 2
49	0 19 11	0 19 1
50	1 2 1	1 1 3
51	1 4 11	1 4 0
52	1 8 3	1 7 4
53	1 12 6	1 11 7
54	1 18 2	1 17 2
55	2 5 11	2 4 10

An employee who commences to contribute at thirty years of age or over may elect within the first twelve months as to his contributions:

(a) He shall not be compelled to contribute for more than two units of pension (£52).

(b) He may contribute for two such units at the rates prescribed for age thirty.

(c) He may contribute for additional units (of £26 a year each) in accordance with the prescribed scale, and at the rate for his actual age, but not in any case exceeding six units (£156 a year pension), and the employer shall then contribute also in respect to such units as if these units were compulsory.

The following table shows the schedule of contributions for a scientific expert, representing a class whose age of entrance and salary are analogous to those of the beneficiaries of the Carnegie Foundation.

<i>Age</i>	<i>Salary</i>	<i>Total Pension</i>	<i>Increment of Pension</i>	<i>Increment of Bi-monthly Contribution</i>	<i>Total Bi-monthly Contribution</i>	<i>Annual Contribution</i>	<i>Per cent of Salary</i>
	£	£	£	s. d.	£ s. d.	£ s. d.	
26	250	104			0 8 10	12 10 0	4.2
27	270	130	26	2 3	0 11 1	13 6 0	4.9
28	290	130			0 11 1	13 6 0	4.6
29	310	130			0 11 1	13 6 0	4.3
30	330	156	26	2 7	0 13 8	16 8 0	5.
31	350	156			0 13 8	16 8 0	4.7
32	370	182	26	2 11	0 16 7	19 18 0	5.4
33	390	182			0 16 7	19 18 0	5.1
34	410	182			0 16 7	19 18 0	4.9
35	430	208			1 0 0	24 0 0	5.6
36	450	208	26	3 5	1 0 0	24 0 0	5.3
37	470	234	26	3 10	1 3 10	28 12 0	6.1
38	490	234			1 3 10	28 12 0	5.8
39	500	234			1 3 10	28 12 0	5.7
45	600	286	52	13 2	1 7 0	44 8 0	7.4

The increments taken out at ages over forty are voluntarily subscribed for.

This pension plan worked out under expert advice is the most carefully thought out and the most carefully framed plan yet offered. The provisions which it includes

(such as benefits to widows and orphans) complicate the scheme beyond any likely to be adopted for school teachers in American states. The plan shows clearly that any scheme involving a pension equal to one quarter of the salary paid will cost the teacher between three and four per cent.

CIVIL SERVICE PENSION ACT OF SOUTH AFRICA

THE most elaborate and carefully digested plan of civil service pensions in operation is probably that of the Union of South Africa, the act creating which was approved by the Governor-General, the Viscount Gladstone, on June 28, 1912.

The act creates a Public Service Commission, to be appointed by the Governor-General, to consist of three members. The tenure of office is to be five years, and the members are eligible for reappointment, but can hold no other office. They can be removed by the Governor-General, but he must communicate immediate notice of removal to both Houses of Parliament. The chairman of the commission receives a salary of £1500 a year; the other members £1250 a year.

The public service commission administers three funds, which are to be kept distinct. First, the Union Administrative and Clerical Division Pension Fund; second, the Union General Pension Fund; third, the Union Defensive Police and Prisoners' Pension Fund.

A flat rate of contribution of four per cent of the employees' emoluments is exacted from all, except that an employee now thirty-five years of age or thirty-five when appointed can elect whether he will contribute or not, and no employee forty years of age at the time of appointment is allowed to contribute, nor will contributions be allowed from employees receiving wages of less than 5 s. a week or £90 a year. The government of South Africa contributes an amount equal to the total contributions of the employees.

An officer may retire at sixty years of age, or may be retired compulsorily by the Civil Service Board at fifty-five. The pension is one-sixtieth for each year of service of the average salary for the entire period of service. The officer must have contributed for ten years to be eligible to retirement. Disability pensions calculated as above are allowed after ten years of service, if the disability is without fault of the officer.

The total of all contributions, but without interest, is to be returned to an officer who retires voluntarily. Twice the total contributions are to be returned to an officer disabled before he has completed ten years of service, or to an officer who becomes unfit to discharge duties without being actually disabled, or to a female who retires from the service to marry and within three months after resignation produces to the public service commission a certificate of marriage.

In case of death before retirement, twice the total of the officer's contributions

without interest are to be paid. In case the employee dies within five years after his retirement, there is to be paid either a pension for the unexpired part of such term of five years, or the difference between five times that annuity and the annuity which has actually been paid to him. These payments in case of the death of the officer are to be made, unless the deceased has indicated his preference by will, to beneficiaries in the following order: first, widow or widower; second, children or step-children in equal shares; third, father or mother in equal portions, or the survivor of them; fourth, brothers or sisters in equal shares. In case of death due to service, the Governor-General may grant annuities to relatives in the above order, but such annuities never shall exceed more than half of the last salary, and are to cease if the widow remarries, when the male children attain the age of eighteen years, and when the female children attain the age of twenty-five years or marry.

It is expressly provided by the act that pensions are not assignable or subject to execution, and if the pensioner becomes insolvent, the pension cannot be affected. Pensions, however, are terminated by conviction for crime in any part of the king's dominions unless the convict is pardoned, but the Governor-General may extend any or all of the annuity to dependent relatives. The treasury may upon production of satisfactory medical certificate commute for a single payment a pension of £25.

The act specifically declares that it is to have no effect upon the workman's right to compensation for injuries.

CONTRIBUTORY AND NON-CONTRIBUTORY PENSION SYSTEMS

IN my last report I called attention to the distinction between contributory and non-contributory systems of pensions, and presented some argument in favor of a compulsory contributory system. It will be noted, however, that the industrial pension systems that have been described are all of the non-contributory type. The reasons for this throw a suggestive light on our present social and economic tendencies.

A contributory pension system maintained by joint coöperation of an industrial organization and its employees assumes at once a contractual relation. In such a case common justice requires that contributing employees shall have a hand in the management, and that all contributions to persons leaving the service be returned with fair interest added. Corporations have been slow to accept these conditions, not only on account of the uncertain financial load involved in the contributory pensions, but also on account of the hesitation of most organizations to limit their own independence of action. It must also be admitted, I think, that the pension system has been adopted, in some cases at least, on the partial theory that it is a deterrent against strikes. Such phraseology, for example, as the following clause from the provisions of a large industrial organization would suggest that such an idea was in the minds of the managers: "Discontinuance of regular work without permission for any other

reason than sickness or accident will be deemed sufficient cause for the forfeiture of all benefits accruing under the plan." In general, the rapid spread of pension systems among industries in which strikes are most likely to occur is due in part to a desire to afford one more reason against a strike, and in order to be used in this way, it has been assumed, I think on somewhat superficial grounds, that the system must be non-contributory.

Naturally, too, the non-contributory system appeals at first glance to the employees more strongly than a contributory system. It touches that universal chord in human nature which responds to the idea of getting something for nothing.

There is grave doubt whether the non-contributory system of pensions—aside from the moral and economic objections to it—justifies even this hope. An interesting commentary on this idea, at least, is afforded by the action of the civil servants under the English Crown, who by practically unanimous action three years ago succeeded in abolishing the non-contributory pension system maintained for their benefit from 1859 to 1909.

The complaints brought against the system were two. First, that the effect of the system maintained entirely at government expense was to depress salaries by an amount far in excess of the benefits of the pension; hence such a system, altho non-contributory in appearance, was in reality a contributory system. Second, that altho under a contributory system every man who dies or leaves the service at an age below the pensionable limit receives himself or leaves to his family his accumulated contributions with interest, on the non-contributory plan, the indirect contributions of all are for the benefit only of those who live beyond the pensionable age. Whatever the true grounds of these complaints, and giving some weight to the possibility that the action of the Liberal government in abolishing the system was in some measure influenced by political considerations, the incident is of special significance as showing that, in the long run, employees of any organization are likely to become dissatisfied with a system in which they share neither the financial responsibility nor the power of management. The idea that a pension system can be made to serve as a deterrent to thoughtless and unjust strikes has some truth in it, but that result can be brought about only by the gradual increase of thrift, by the development of friendliness and confidence between employer and employee, and by a common share in the pension problem. Toward these results a non-contributory pension system—even when generously meant—is likely to aid but little. It runs counter to certain universal tendencies of human nature.

It would, however, be unjust to imply that industrial organizations have adopted the non-contributory plan wholly, or even mainly, on the ground of self-interest. On the contrary, the purpose back of all these efforts has been good, and the difficulties in the way of inaugurating a contributory system are serious, even aside from the question of the independence of the pensioning agency.

So seldom are these problems brought into the range of the non-technical reader,

and so numerous are the pension plans now being inaugurated, that I venture to point out somewhat in detail the other difficulties that have stood in the way of the adoption by business organizations of the contributory form of pensions.

The greatest obstacle is of course the uncertainty of the financial load which is assumed.

In all contributory systems, experience has shown that eventually the contributors will demand four things: first, that if a contributor is dismissed or resigns voluntarily before the pensionable age, he shall be paid the amount of his total contributions, with interest; second, that if a contributor becomes disabled before the pensionable age, he shall receive either a full or a proportionate pension; third, that if he dies before retirement, his estate shall receive the amount of his total contribution, with interest, or even the amount of both his and his employer's contribution, with interest; fourth, that if he retires upon a pension, but dies before the total amount of his pension receipts equal the amount of his total contribution, with interest, his estate shall receive the balance.

Some of these demands are unfair; such, for example, as the claim that a contributor disabled before pensionable age should receive as large a pension as if he had continued to work up to the retiring age fixed by the rules. Similarly, to demand that in case of death before retirement, the contributor shall receive not only his own contribution, but also a portion of that of the employer, is unreasonable. Such claims are not likely to arise under carefully and fairly framed rules. But even when all of these cases are eliminated, it still remains true that the uncertainties of employment, the changes and possible dissatisfaction and hostility in the body of employees, might bring about a situation under which a serious financial burden would remain.

¶ In the eyes of the management of an industrial organization the difficulties are still further magnified when the actuarial examination brings up a much more formidable financial difficulty which confronts the practical operation of a contributory pension system, the neglect of which has done more than all else to bring contributory pension systems into disrepute,—namely, the accrued liability incurred at the inauguration of such a plan. If a pension system were founded simultaneously with the assembling of a group of employees, the matter would be very simple, for such an enterprise starts with young men. But this is never done. It is only when men grown old in the service begin to arrive at an age when they ought to retire that the authorities of the organization — whether it be a college, a bank, or an industrial corporation — consider the problem of pensions seriously. The problem by this time has become vastly more complex. The service contains men of all ages, from youth to those already of pensionable age. Many employees will contribute little before they retire; the majority will not contribute half of what will be paid eventually by the young men just entering employment. In consequence, within a few years the pension system will undergo a strain far beyond that which would have come if the system could have started with young men. ¶ The only practical way to meet this difficulty

is for the pensioning agency to put into the fund during the earlier years of its history enough money to make up the difference between what each employee's contribution actually will be and what it would have been had the pension system been started with a group of young employees.

If the authority inaugurating a contributory pension system finds the cost of accrued liabilities beyond its resources, it can deal with the case in another way by reducing the extent of the contemplated pensions. A very modest system of pensions is, as has been said before, better than none. By annual gifts and by some care for specially deserving cases, it will be possible to get thru the long period of accrued liabilities into safe waters.

✓ Another practical objection to contributory systems, and one equally serious, is the difficulty of fixing and enforcing rates of contribution that are equitable and adequate. Ordinarily there is assessed what is called a flat rate, that is, each employee is assessed a fixed proportion of his salary, say three per cent. ✓ All the great contributory systems of the world, from that of the German government down, adopt this method.

Such a uniformity of contribution is unwise, because each individual who may become a pensioner in the future constitutes a liability against the fund which varies according to the likelihood of his reaching the pensionable age. ✓ The only method of estimating this liability rests on the age of the individual. When a pension fund is established in a going concern, each person must be considered and a separate fund allowed for each, according to his life expectation. The flat rate of contributory pensions disregards this fact. ✓ The employee who enters the service at twenty-five and remains until he is sixty-five—if that be the pensionable age—will continue to contribute for forty years, and with forty years' opportunity for compound interest will contribute the same proportion of his salary as the employee who enters the service at forty-five, and who contributes for only twenty years.

The experience of contributory systems shows that the flat rate is a source of much discontent. The men who begin to contribute when young are constantly complaining. Such complaints are not always sound. For instance, the English government had a flat rate contributory pension system for its civil servants from 1829 to 1859, but it kept no separate pension fund. Contributions were merely paid into the Exchequer and the government paid the pensions. There was loud complaint that the rate of contribution was so much higher than was necessary that the government was making money from the system. When an actuarial study was made after the abolition of the system, it was found that had there been a separate pension fund, it would have been insolvent. ✓ The only scientific method for managing a contributory pension fund is to open a separate account with each individual; to assess against his salary a contribution proportionate to his age, having determined what contribution at each age will furnish sufficient capital to sustain—with the help of the funds furnished by the pensioning agency—the pensions for the probable period of retirement. ✓

These considerations will serve to make clear why industrial corporations—entirely apart from the desire for independence—have hesitated to inaugurate pension systems on the contributory plan. There is no question but that the effort presents difficulties, but it also remains true that until pensions are put upon the contributory basis, they must remain extremely small, they will have little influence in arousing the spirit of thrift, and they will contribute little to the sense of mutual confidence between employer and employee. The ideal system would rest upon the contributions of both, and be managed by a board representing all interested parties, one of which is the public. A very wise feature of the German industrial pensions has been the presence of representatives of the government who stood for the interests of all.

The following statements contain the principles that experience has shown to be worthy of particular attention in the case of those organizing industrial pension systems:

1. The pension system, if undertaken, should be adopted solely on the ground of the benefit to those in employment, and with no ulterior purpose.

2. The pension system should be on the contributory plan, maintained at the cost of the company and of the employees.

3. The management should be in the hands of a board composed of representatives of the company and of the employees. In many cases an outsider will be a useful member.

4. The sum paid in by any employee should be returned with a moderate stated interest in case of his resignation from the service before the pensionable age, or in case of his dismissal. In case of his death before the pensionable age, this sum should be returned to his estate.

5. No step should be taken in the fixing of rates or benefits except upon expert actuarial advice.

6. Since no actuary can tell in advance exactly what will occur, the rules of the pension fund should require an examination at stated intervals, and the constitution should reserve the right to the representative board to make such changes as experience may show to be necessary in the interest of all.

SUBSISTENCE AND STIPENDIARY PENSIONS

THE systems of pensions just described should always be considered from two points of view, which, as a rule, do not occur to the average intelligent man. From these points of view all pension systems may be separated into two classes, according as the object of the pension system is merely to shield the pensioner from actual bodily want, or whether its object is to maintain him after retirement in a position approximating that which he enjoyed at the culmination of his active service. This difference is fundamental, and makes the great difference in cost between the two systems. Under

the first plan would be grouped the old age pension systems of the various governments, and most of the industrial systems of pensions just described.

The following list of the average pensions provided by American railroad pension systems illustrates the scale of provision for old age contemplated in their organization. Altho the majority of those drawing pensions are laboring men, it will be noted that the size of these pensions has no close relation to the earning capacity of the individual in his active life, or to the continuance of his life after retirement on a plane comparable to that upon which he has been accustomed to live. They are designed merely to protect him against actual bodily want. For anything more than this, the individual must look either to his own exertions or to aid from others. These average annual pensions are as follows :

The "Big Four" Railroad	\$206.76
Philadelphia Rapid Transit Company	240.00
Pennsylvania Railroad	241.00
Atchison, Topeka and Santa Fe Railroad	255.00
Canadian Pacific Railroad	274.00
Delaware, Lackawanna and Western Railroad	275.00
New York Central Railroad	312.84
Union Pacific Railroad	314.00
Buffalo, Rochester and Pittsburgh Railroad	325.50
Philadelphia and Reading Railroad	362.00

The fact that these pensions are small is not urged as an objection against them. Where pensions are to be distributed on a large scale without contributions from the participants, it is inevitable that they should be small. And such pensions go far to lift from the shoulders of old age its worst burden. The man with a sure income of two or three hundred dollars is on a very different basis of independence, even if he must live with children or relatives, from him who has no such support in old age. Comfort and pleasure may be to a considerable degree out of his reach, but at least the wolf cannot enter the door.

Pensions for men in professions which call for a high order of merit and culture, which involve in general a large service of the individual to the public good, have been based upon the other principle, namely, that the individual shall receive a pension equivalent to a large proportion of his earning capacity at its culmination, and sufficient to afford a dignified life upon a plane comparable to that upon which he has lived. A pension of two or three hundred dollars a year would mean much to a workingman after old age has dulled his activities, but as a retiring allowance for a justice of the Supreme Court, a general, or a college professor, it would be a mere travesty.

The distinction is a fundamental one, and it carries with it very far-reaching consequences upon the financial side. Pensions conducted upon the latter plan are enormously expensive in comparison with the former. Accordingly such pensions must be for the few, rather than for the many, unless indeed a feature of the system is a compulsory contributory plan carried through a long series of years.

A FEASIBLE PENSION SYSTEM FOR A COLLEGE

THE Foundation is constantly asked for suggestions and advice by the authorities of colleges who contemplate the establishment of independent pension systems for their own institutions. This movement is itself one of the fruits of the establishment of the pensions inaugurated by the Foundation. Ten years ago very few college trustees considered pensions for old teachers as one of the expenditures coming within the obligations of a college board of trustees. The conception that college trustees then had of their duties did not include any feeling of obligation to care for the old or the broken teacher, or such sense of obligation as existed was, at most, largely personal. The individual trustee might do something with his own means, but the notion that he could use the college funds for such a purpose was practically unknown. Such an obligation had no weight in comparison with the desire of the college for a new laboratory, or a new campus, or even a new stadium. The fact that so many colleges are now asking themselves seriously whether this duty is not as real as the obligation to provide larger physical facilities, is a hopeful indication of a new social spirit in our institutions of learning, and still more an indication of the direction of the attention of those in control toward meeting the more pressing human problems as well as those of a more material nature. For twenty-five years the demand in our institutions has been for more students, more halls to hold the new students, more advertising to get yet other new students to fill the new halls, and for more money to meet the needs that the new students brought. It is an endless chain. Very few institutions have been willing to limit their student body to the number that they could serve honestly and efficiently. In this process no group of men has suffered and endured more than the college teacher. As the student body has expanded, the load on the teacher has grown heavier and heavier, particularly in those institutions where the tradition of thorough work has been strong. Under the conditions that have existed, the faculty that had served two hundred students has struggled, with but small increase in its numbers, to serve four or five hundred students. Such a situation means one of two things,—the work becomes superficial, or the teachers break down before their time. This last process, going on under the eyes of trustees, has perhaps done more than any other thing to bring home to these governing boards a realization of their own duty in this matter. In time the college conscience may be so aroused that it will be sensitive also about accepting students whom it cannot serve. For the present situation the teacher has almost as great a responsibility as the trustee. There are few teachers who are not eager to see numbers increased, even at the expense of their own health.

From a variety of causes—a quickened social sense, a clearer appreciation of the obligation of the college to its teachers, a desire to offer advantages comparable to those given in the better colleges and universities, in part I hope from the influence of the Carnegie Foundation—a number of colleges are beginning to deal indepen-

dently with the question of pensions for teachers. In some institutions it has simply taken the form of an occasional pension for an old and honored man, with no explicit obligation on the part of the college to introduce a general system of pensions. In other cases the college has begun the effort to raise money for a pension system. It is from such institutions that inquiries are addressed to the officers of the Foundation.

The questions assume one of two forms.

The first can be illustrated by an inquiry recently submitted in the following terms: "Our college has an instructing staff of 25, an annual payroll for this staff of \$60,000. What endowment ought we to raise in order to establish a pension system as generous as that of the Carnegie Foundation and which will be absolutely secure?"

It is impossible to answer this question. First of all, to make even an actuarial estimate, the details of age and salary must be known. But when all of this data is brought together, the wisest actuary could not make an estimate that would be of practical help. The best he could do would be to point out certain limitations beyond which it would be unwise to go. To express it in another way, if a sum of money were named which would be absolutely satisfactory from the actuarial point of view, either the sum would be so large, and so great a proportion of it would need to go into a reserve to care for accrued liabilities, unknown contingencies, and the like, that the total would be beyond the reach of any college; or else the rules would need to be set upon so meagre a scale that the pensions would be of very little value to those whom they were instituted to serve. The problem is indeed insoluble on a purely actuarial basis. If a college is to wait to begin pensions until it can accumulate a sum of money that will insure its pension system for all time under fixed rules, it will never begin. As pointed out in former reports, any pension system working under fixed rules will in the end reach the limit of its income, unless it has sources for increasing this income,—such, for instance, as a government appropriation or an outside endowment.

The question in this form is, therefore, impossible of answer on any basis that a college can hope to meet. It is like asking that a college have in hand, before opening its doors, all the endowment it is ever going to need. There is no such thing as an ideally satisfactory pension system. Unlimited money could not produce it. Like all other such social and humane agencies, the right results are brought about only by the exercise of devotion, self-restraint, and unselfishness.

On the other hand, when approached from another point of view, the question is capable of a sufficiently practical answer. The question would then need to be attacked from some such position as the following: Given a college, of the American type, with an instructing staff of 25 and an annual salary roll of \$60,000, what pension system can be devised that will take care of the aged and broken, and of their widows, which shall give reasonable security to those concerned, and still maintain solvency? This is the question that, as a rule, trustees really have in mind. The answer to even this question is by no means simple. When the Carnegie Founda-

tion has had twenty more years of experience, the answer can be made much more exact. Nevertheless, it is possible, with good judgment, to inaugurate now a pension system that shall be workable and adaptable to future needs.

The first question to be settled in such an inquiry is whether the income of the pension system shall be derived partly from endowment and partly from contributions, or whether it shall rest wholly on the income from endowment.

In a preceding paragraph I have set forth the advantages of a compulsory contributory system. Notwithstanding the fact that it is the fairest system, and financially the soundest when strictly administered, nevertheless, for a single institution it is almost impossible. First of all, the cost of a contributory system bears sharply on the contributors. If the pensions were paid entirely from contributions, a man entering the college at thirty-five would have to pay about five or six per cent of his salary in order to retire at sixty-five upon such a pension as the Foundation pays. If he entered at a more advanced age, the percentage would be necessarily larger.

Secondly, the number of persons involved in such a pension system would be too small to give the law of probabilities a fair chance. An industrial company with a group of thousands of employees can safely assume that the risk will be fairly represented by actuarial computations, but in so small a group this assumption would be unsafe. For such an institution a pension plan would be safe only in combination with a number of other institutions, this common pension system being based upon a large number of lives. Such a plan would be difficult to bring about. The institution, therefore, that undertakes to start a pension system for its teachers finds the establishment of an endowment for this purpose the most practical way open.

How large an income from endowment must be secured to meet the needs of such a group of teachers having a salary roll of \$60,000?

There is no experience that indicates any widely general ratio of pensions to salary. Government civil service pensions are estimated at 6 per cent of the salary list. In the table on pages 88 and 89 it will be noted that the ratio in accepted institutions of the present pension outgo to the salary list is on the average 4.1 per cent. This applies to a group of 5025 teachers. The smallest ratios come generally in the larger institutions. A number of the smaller colleges show very high percentages. Any deduction from a few such cases is, therefore, misleading. In many cases a college staff will come to possess, after a series of years, a considerable group of older men. When the Foundation's pensions were established, numbers of such older men were retired by it in a group. In some of these institutions there will be no more pensionable teachers for a considerable period. All general deductions from such limited experience are therefore subject to large errors. On the whole, however, the experience of the Foundation would seem to show that an expenditure of somewhere between 6 and 10 per cent of the active salary list will carry a reasonable pension system, but that in small colleges the fluctuations are likely to extend over wider limits than where larger groups of teachers are concerned. A college, therefore, with such a salary list as that just re-

ferred to could safely inaugurate a pension system for its teachers, comparable with that of the Foundation, with an endowment of \$150,000 to \$250,000 invested at four per cent. In order, however, that such a fund should bring the relief desired without more disappointment than is inevitable,— it is impossible to conduct any pension system without disappointing those who are just outside the limits chosen,—the following general precautions must be observed:

First, the beneficiaries should understand that the system assumes no liability beyond its income.

Second, it should be made clear that the interest of all is conserved by living strictly within the rules that are adopted. It is difficult to establish a proper appreciation of the absolute necessity for doing this. A large part of the correspondence of the Foundation even yet is devoted to the effort to explain why it must work within the established rules, and to the endeavor to assuage the indignation of those who feel that the most worthy are neglected thereby. In presenting to the Foundation the name of a noble and faithful man who had taught in country schools in an isolated mountain region, a college president recently added: "I wonder if in the face of this the Carnegie Foundation will talk about rules and inviolable regulations. I wonder if they can use the stock phrases regarding exceptions, worthy cases, and the enforced necessity of business regulations." And yet the applicant in this case had never been a college teacher, and was excluded by the deed of trust by which the members of the corporation hold their trusteeship. Whoever has to do with the management of a pension system will discover that even those directly interested in its benefits will demand simultaneously that exceptions to the rules be made in any case in which their emotions are touched, but that such exceptions shall not affect the financial operation of the system! And yet after all, this is not a phenomenon to be wondered at or scolded about. It is genuine human sympathy exercising itself in a field where it is uninformed.

The Foundation has had not a long but a rich experience in this particular field. Its officers and executive committee originally undertook to meet exceptional cases that lay outside the rules. They learned only by experience the impossibility of making such exceptions. Any college starting its pension system will need to educate its constituency to this knowledge.

Again, it will be wise for the pension system in such a college to be administered by a board composed in part of the teaching staff. Not only is this arrangement one that accords with our Teutonic ideals of freedom, but it is the only way in which the teaching staff can get a fair idea of the need for strict observance of the rules, and can be made to realize that the safety of their own pensions depends upon such an observance. From every point of view the participation of the beneficiaries in the management is desirable.

As a part of the strict observance of the rules, the management must have the courage in times of light demand to accumulate a surplus against the time of extraor-

dinary demands. A great difficulty in administering such a system for a small body lies in the fluctuations that will arise. After some years during which little demand has been made upon the income, the temptation to go outside the rules becomes hardest to resist.

The experience of the Foundation shows that the minimum age limit should be set higher than sixty-five. On the average, teachers retire at somewhat over sixty-nine. From the correspondence that comes to me I am inclined to think that a considerable proportion of those who retired at the minimum limit would not do so if they had their choice to-day, and that a still larger proportion would be happier and more useful in their old places.

Just what age is the best to set as a minimum limit it is difficult to say. The whole matter comes back to a conception of the pension which is somewhat different from that which we all very naturally entertained at the beginning, that is, that the pension is not intended to assist the man of strong body and mind to get out of teaching at any assigned age, it is to take care of him when his powers fail and he can no longer do his work well. To raise the limit of age works no hardship to the man who is broken in health at sixty-five. Such a man would be retired on the ground of disability. One places a different ideal before the teacher, moreover, when he suggests retirement on the ground of approaching weakness rather than on the ground of a definite limit of age.

The experience of the Foundation also tends to show that after a certain age and service (let us say after sixty years of age and twenty-five years of service as a professor), it would be wise to permit a teacher to accept a diminished duty with diminution of salary while basing his pension, when its time comes, on the last five years of full active pay. Such suggestions have been made in the past, but there have been rather serious difficulties in the way of carrying them out. These difficulties would in large measure be met by offering the privilege only to men of given age and service.¹

In the conduct of such a system as is here contemplated for a small college, it goes without saying that with rising salaries and growing staff the endowment of the pension system will need to be increased from time to time, which is nothing more nor less than must be faced with every other problem with which the college deals.

Finally, the actual outcome of such an effort will depend on the education of the college constituency to the right conception of what the pension system can do and ought to do. Success means not only that the needs of those who have earned and who desired such aid have been met, it also means that the happiness and contentment of the whole body of teachers has been conserved. In order to do this, those directly con-

¹ The Trustees, on November 20, 1912, amended the rule governing the reckoning of retiring allowances to read as follows:

"In reckoning the amount of the retiring allowance the average salary for the last five years of active service shall be considered the active pay. In case, however, a professor agrees with his institution to continue at any time after reaching the age of sixty-five part time work for a diminished salary, he may do so, and upon his retirement his allowance shall be computed upon the basis of the last five years of full pay. In the case of his death in this interval the pension of his widow shall be reckoned upon the same basis."

cerned must be led to distinguish between the man who merely wants a pension and the man who ought to be pensioned, to appreciate that the conferring of an allowance in the one case would be a mistake and in the other an honor to the system and to the man. In other words, the essential problem in the inauguration and conduct of a pension system in a college depends only partially on financial and actuarial considerations. Its usefulness in large measure is in the point of view of those who are to benefit from it. And the more they share in its management and responsibilities, the more clearly will they appreciate both its advantages and its limitations.

Any college that will undertake the problem of pensions in some such spirit and manner as is here outlined, making use always of good actuarial and financial counsel, and educating its constituency to a conception of their own opportunities and responsibilities, can conduct a pension service with an endowment well within its reach. There would not always be a pension waiting for a teacher the moment that he complied with the minimum conditions, but he would seldom need to wait long for it. Security and contentment will be the greater as they are associated with a high desire to serve, an unselfish appreciation of the needs of others, and a realization of the fact that money alone cannot create an ideal college pension system.

A FEASIBLE PENSION SYSTEM FOR PUBLIC SCHOOLS

WHILE the work of the Carnegie Foundation has to do primarily with pensions to the teachers in a limited number of colleges and universities, it goes without saying that a keen interest is taken in the problem of pensions for public school teachers. The reports of the Foundation have continually aimed to emphasize the interdependence of the college and the public school system. Our educational problem is one problem, and if there is a justification for pensions for teachers in the colleges, there is a still stronger justification for pensions for teachers in public schools, where salaries are lower, work is harder, and the conditions of service are in every way more difficult. One of the great weaknesses of our public school system to-day lies in the fact that only a small number of men can be induced to undertake permanent careers in it. Before we can hope for the best results in education, we must make a career for an ambitious man possible in the public schools. To do this, dignity and security must be given to the teacher's calling, and probably no one step could be taken which will be more influential in inducing able men and women to adopt the profession of the teacher in the public schools than to attach to that vocation the security which a pension brings.

This problem is now before the legislatures of many states. It is going to be an increasingly insistent question. In the presence of such suggested legislation, the thoughtful legislator will wish to ask at least four questions: (1) Upon what grounds are pensions for public school teachers justified? (2) Assuming that pensions ought to

be paid, who ought to pay them? (3) What form of pension system would it be fair to adopt, having regard both to the individual teacher and to the state? (4) What will such a pension system cost the individual teacher and what will it cost the state?

When these four questions have been answered, a feasible pension system for the public school teachers of a state will have been described.

While it is not possible to answer these finally for a particular state without a thoroughgoing examination of the salaries, ages, and lengths of service of the teachers who compose the system, it is nevertheless possible to give a general answer, sufficient to guide the inquirer in forming a judgment. The literature of the subject is extensive, both in English and in German, and the experience already gained has demonstrated certain fundamental principles which may be considered as settled. I venture, therefore, to outline the following answers to these four questions in the light of the experience of existing pension systems in this country, in England, and on the continent of Europe.

1. Pensions are justified upon practically two grounds: first, those of a larger social justice; secondly, as a necessary condition to an efficient public school system.

The first of these reasons applies in marked measure to pensions like that of the teacher. Society, as at present organized, desires to get the best service it can out of the various vocations and callings into which men are naturally distributed. In some of these callings great prizes are to be won, and these serve as incentives for high performance. In other callings, like that of the teacher, there are no large prizes in the way of pecuniary reward (it would be a wise thing in society to create such). Society desires to obtain of the teacher a service quite out of proportion to the pay which he receives. Intelligence, devotion, high character—all are necessary, and the state seeks to obtain them at an average salary of \$500 a year. It is clear that, if the state is to receive such service, some protection for old age and disability must be had, if the best men and women are to be induced to enter upon such a calling as a life work.

Secondly, from the standpoint of efficiency in organization, whether a governmental one or a business one, there must be some means for retiring, decently and justly, worn-out servants. In the past we have in most cases turned out men and women no longer able to teach, but the conscience of our time does not permit such action. Out-worn teachers remain to the direct injury of the pupils themselves. As a matter of efficiency, some humane method of retirement for public school teachers is necessary.

These two reasons for the establishment of pensions for the teachers in state schools are sound and unanswerable.

2. Three plans for securing protection against disability and the weakness of old age are proposed: a pension system borne wholly by the employer, a pension system borne wholly by the employee, a pension system conducted jointly by both employer and employee and supported by their joint contributions.

While there are some variations of opinion among those who have studied the question, the overwhelming weight of opinion is in favor of the third plan.

A pension system resting upon the contributions of the employer alone has many objections, not the least being the lack of coöperation and of the incentive to thrift which are likely to be produced by it.

A system of pensions depending on the contributions of employees alone amounts practically to a compulsory system of saving. In order that the benefits may be large enough to form a basis for retirement, the contribution must be so large as to be practically prohibitory.

The third plan seems to me justified not only on the ground of equity, but upon the ground of self-interest, whether the employer be a corporation or a government. All salaries such as teachers' are relatively low, and while the question of a just salary must not be confused with the equity involved in a relief plan, it nevertheless remains true that the general equities of service demand that a part of the pension of a servant be borne by the employer. A state still owes to the faithful teacher something after it has paid his salary. He has been required to regulate his life in large measure for the common interest. In addition the employer, whether a corporation or a state, secures a higher efficiency by a well-ordered pension system. Finally, only by such joint action can be secured the right coöperation between employer and employee. On all three grounds—the ground of general equity, of increased efficiency, of a better social coöperation—it is desirable that a system of pensions rest upon the joint contribution of the employer and the employee.

I assume that on the whole it is fair for the teacher to bear half the cost of the annuity and the state the other half.

3. The form of pension system at once just and feasible would involve the consideration of many details, but at least these general principles may be assumed as proven:

(a) The pension obligation should be compulsory upon every teacher who enters the service.

(b) The amount of the contribution should be determined by thorough actuarial investigation, but each teacher shall form a unit, and the annuity which he is to receive shall be based upon his own payment plus that granted by the state. Such an arrangement is just and fair, and is capable of actuarial computation. Every individual, whether he survives, resigns, or dies, thus furnishes the basis for the action taken.

(c) Contributions levied upon teachers who resign or are dismissed must be returned with a moderate interest—say three per cent—and similar returns must be made to the widows or heirs of those who die.

(d) A central administration for the pensions of all public school teachers should be provided, constituted of a small commission serving without salary, with a paid executive who should at the same time be a competent actuary.

4. The cost of such a pension system to the state or to the individual can be approxi-

mated only after some assumption is made as to the amount of the pension to be paid in the individual case. In order to arrive at some estimate, I assume that the teacher is to receive a pension of fifty per cent of his pay at the time of retirement, one-half of the pension to be provided by his own payments, the other half by appropriations from the state treasury. Thus, a teacher in the grammar school who receives \$500 a year, which is somewhat higher than the average, would be paid at the assumed age of retirement—say, sixty years—a pension of \$250, of which his own contributions must furnish an amount sufficient to supply an annuity of \$125, and the state the remaining annuity of \$125. The teacher who enters at twenty-five would need to pay, in order to provide his annuity at sixty, about three and a half per cent of his salary—in other words, something less than \$20 a year, which, compounded at four per cent, would take care of his half of the annuity. Should the teacher die or resign in the interval, the state would repay his accumulations with interest at three per cent, a process which ought to furnish a small profit, but which, on the other hand, gives to the teacher's family a protection which is most important and most needed. On the whole, therefore, for a pension system which aims simply to retire individuals at sixty, the teacher must expect to pay a proportion of his salary amounting to from three and a half to six per cent, according to the age at which he enters.

Assuming a school system comparable with that of, let us say, the state of Kansas, or the state of Virginia, or the state of Iowa, with approximately 12,000 school teachers, how much would such a system cost the state? And what rules should be inaugurated at the start which may be at once consistent with the security of those who contribute and with the dignity and honor of the state? for when once the state accepts the contributions of these teachers and enters into a contractual relation with them, it cannot insert into the provisions of its pension system a clause reserving the right to amend the conditions at will. Assuming a constituency of public school teachers of a state to number 12,000, and that they receive an average salary of \$500, what would the system ultimately cost the state, if it paid one half of the pensions which might accrue under such a simple pension scheme as I have assumed, namely, a pension system which retired teachers at sixty years of age upon half pay, the teacher providing one-half of the pension?

This question is the hardest of all to answer. The wisest actuary can make only a guess. The chief uncertainty arises out of the fact that comparatively few teachers remain permanently in service to the age of sixty. At present the great bulk of teachers are women. Many of these marry. Others, for one reason or another, drop out of teaching. The number who take their calling seriously and who will persist to the end of their active life is, of course, increasing, but any estimate as to the number who will ultimately earn pensions under such a plan is subject to large error.

In Virginia, for example, the men teachers in the calling at the age of sixty form about 5 per cent of those who started; if there had been no retirements, they would be about 60 per cent. Similarly for women teachers, those at the age of sixty form

about 16 per cent of those who started, while had all persisted to the age of sixty except those removed by death, the percentage would be 67. As the women teachers far outnumber the men, it may be said roughly that the fluctuations lie between 15 per cent at the present time and a possible 65 per cent. The statistics for Illinois are quite near these. Perhaps the assumption of 40 per cent, the arithmetical mean of these two limits, would be as close an approximation to the facts a generation hence as could be made. Such a school system of 12,000 teachers at an average pay of \$500 and paying pensions on the basis assumed would therefore develop a charge upon the state treasury of \$600,000 a year, which is ten per cent of the salary cost, and which probably represents approximately the maximum load which a state like Kansas or Iowa would in the course of a generation assume in adopting such a system. This load would, of course, be greatly reduced by advancing the age of retirement from sixty to sixty-five.

The form of pension system here assumed is the simplest possible. It provides a pension in but one case, namely, that of the individual who has come to the age of sixty. It does nothing for the teacher who has become disabled at an earlier period, or for the families of those who died. Such a provision would, however, take care of that main load which affects both the question of justice and the question of efficiency, and would go far to solve the wants which a pension system can meet. It will be wise, in my judgment, for such systems to be formed upon very simple lines, and not to attempt to meet every individual case, but to provide justly for the one or two great sources of need which appeal both to our sense of justice and to our ideals of efficiency.

There is one modification of this simple scheme which would add little to the expense, but which would cover practically all that a pension system for public school teachers should at this time attempt to do, that is, the payment of a proportionate pension for a given length of service in case of disability. For example, a state might well afford to pay, after fifteen years of service and of contribution, an agreed-upon proportionate pension to the teacher who had broken down in its service.

These general principles will, I believe, be found to cover the essentials of a state-wide pension system for public school teachers. Such pensions undoubtedly are to be paid. Both our sense of justice and our ideals of efficiency demand it. The danger is that they will be begun under unwise and imperfect conceptions, which ultimately will defeat, or at least retard, as was the case in New South Wales, the whole movement. The one word which needs to be spoken to any association of teachers and to any body of legislators who are to deal with the question is, to take no step without sound actuarial advice, and to make use of the rich experience of the past which is now available.

As pension systems become numerous, it will be desirable to arrange some equitable plan for the reciprocal exchange of contributions and liabilities, so that a teacher, transferring from a school under one pension system to a school under another system, will not lose the accumulated right to a provision in old age.

In the minds of many there will still remain the question whether, in the light of what the Federal Congress has done in the matter of civil war pensions, any state government can be trusted to control such a relief system, free of politics. The Commission on Economy and Efficiency appointed by President Taft recommended as a plan of retirement for civil employees of the Federal government a system of annuities supported from the contributions of employees alone, based upon the age of entrance into the service; the maximum annuity to be \$600. The government is to provide for the accrued liabilities in excess of eight per cent of the employee's salary, and to guarantee four per cent upon the contributions of the employees. The system will apply to government employees in the District of Columbia only. The plan, which has been worked out in most complete actuarial form by Mr. Herbert D. Brown of the Department of Commerce and Labor, contemplates the return to an employee leaving the service prior to the age of retirement of all contributions with interest at four per cent compounded annually, and the return to the legal representatives of an employee dying either before or after retirement of the amount in hand not yet paid out to him in annuities, with interest. The retiring age is seventy.

This plan is really not a relief plan, but a system of compulsory saving. The Commission was evidently strongly influenced in its conclusions by the fear that any pension system administered by Congress which involved a payment by the government of even part of a retiring allowance would be subject to political abuse. No one familiar with the history of civil war pensions can doubt the possibility of such a misuse of public money. The civil war pension history constitutes our greatest political scandal. To Congress and to the country it has been a source of untold demoralization, and the presidents of the United States share with Congress the responsibility for this legislation. Except Grover Cleveland, no President of the United States has shown courage in the face of a pension bill. The tale is told briefly in the following summary:

When the civil war began there were on the pension roll of the government 10,700 names at an aggregate annual expenditure of \$958,000. Congress passed an act on July 22, 1861, extending the pension privileges of soldiers of the regular army to volunteers who were wounded or disabled while in the performance of service, but as this hastily drawn law did not cover the volunteer enlistments of April 15 and May 3, 1861, nor in the opinion of Attorney-General Bates open the pension rolls to the widows of volunteers killed in the service, it was necessary for Congress to provide careful legislation to meet the needs arising from the civil war, and not leave the new pension situation to be met by such obsolete statutes as those of 1802 and 1813.

This comprehensive legislation was enacted on July 14, 1862, and formed for nearly thirty years the basis of all pension legislation and adjudication. It provided for moderate pensions to all former soldiers disabled either by wounds or by disease while in the performance of military duty after March 4, 1861, for pensions to the

widows of those dying by reason of such wounds or disease, and for pensions to dependent relatives. This legislation was enlarged and increased in details by acts of 1866, 1868, and subsequent years, but the principle upon which it was constructed remained unaltered. By the year 1887 the total expenditure for pensions had risen to \$73,000,000 annually.

In that year, after a period of agitation by those interested, the Forty-ninth Congress was induced to pass a new bill that radically changed the basis of pension administration. Under this bill pensions were no longer confined to those disabled by wounds in battle or by disease contracted in the service, and to the widows of those dying from such causes, but any person who had served ninety days in the army or navy, and was disabled from any cause, no matter how or when occurring, was made pensionable. Any widow of a soldier who had served ninety days was also pensionable if her annual income was less than \$250, and she had been married before the passage of the act. President Cleveland vetoed this bill, the only instance on record of a presidential veto of general pension legislation, on the ground that the duty of the country was discharged by providing for those who suffered by reason of injuries received while defending it, and that there was no obligation on the part of the government to constitute the soldiers of the civil war into a special privileged class who would always be taken care of even when their military service had left upon them no injurious effects. The House of Representatives failed to furnish the constitutional two-thirds majority necessary to pass this bill over President Cleveland's veto.

Such a bill, however, passed the Fifty-first Congress, and was approved by President Harrison on June 27, 1890. The annual pension expenditure, which in that year stood at \$106,000,000, was increased under this new legislation until by 1898 it mounted to \$144,000,000. A natural decline then set in, but was checked by the enactment of new legislation by the Fifty-sixth Congress, approved by President McKinley on May 9, 1900, enlarging the benefits of the act approved by President Harrison. This new act and the pensions resulting from the war with Spain brought the annual pension roll up again to \$141,000,000.

The lapse of more than forty years since the close of the civil war began again, notwithstanding these new increases, to reduce the pension expenditure of the government, when in the administration of President Roosevelt another series of pension extensions took place. Mr. Roosevelt widened the interpretation of the existing laws by executive order, and on February 6, 1907, and on April 19, 1908, approved new pension acts of the Fifty-ninth and Sixtieth Congresses. By the first of these acts all necessity for disability in the veteran, even resulting from causes arising in civilian life, was swept away, and the civil war soldiers were placed upon a simple old age pension provision. All soldiers who served ninety days and had arrived at the age of sixty-two were pensionable, the rate of pension to rise in successive gradations at more advanced ages. By the latter act many of these service pensions were increased

fifty per cent in amount, and widows were pensionable without regard to their pecuniary condition. Up to June 30, 1911, 67,801 pension certificates had been issued under the act of 1908, and for that year the act of 1907 controlled an expenditure of \$61,000,000, and the act of 1908 of \$32,000,000.

Thru this new series of legislation the total expenditure of the government for pensions rose in 1909 to the sum of \$161,000,000, its high-water mark. The lapse, however, of more than a generation since the civil war once more began to counteract the liberality of Congress, and for the fiscal year ending June 30, 1912, the expenditure had fallen to \$152,000,000. But on May 11, 1912, President Taft approved an act of the present Congress increasing the rate of the flat old age pensions at the various age stages and also of the pensions granted under the fundamental act of 1862 to those disabled in the performance of military duty. It is estimated by competent authorities that this latest act will raise the total annual pension expenditure of the government considerably beyond even the maximum expenditure of \$161,000,000 attained in the last year of President Roosevelt's administration.

The outcome of these various acts is that nearly fifty years after the closing of the war there is a civil war pension roll of 801,998 persons, with a cost to the people of the United States in 1911 of \$148,000,000. Such a monument to legislative and executive weakness was never raised by any other people.

It may be added that simultaneously with this general legislation, each successive Congress for many years has passed many special acts extending to individuals by name pension privileges or increasing the rates of pension. President Cleveland vetoed several hundred of these special bills, but his example has not been followed by his successors. The Sixty-first Congress, which sat during the first half of President Taft's administration, enacted 9649 of these special acts granting or increasing individual pensions, which was 3049 more than any previous Congress had ever passed.

Will a state legislature and a state governor administer justly a matter in which the general government and the chief executives have been so weak?

In answer to this it may be said that a pension system in which the employee contributes does not present the same opportunity for political exploitation that the civil war pensions have presented. The man who believes in the future of his country and in democratic progress will be slow to admit that either Congress or the state governments will be found permanently incapable of carrying out so simple an obligation. If our democracy cannot learn from such an experience as that of the civil war pensions, it is helpless to solve the problems that confront it on every hand. In any event, the argument that our government is not honest enough to conduct a justly planned relief system for its employees is a weak reason for inaugurating an unsatisfactory system.

THE PENSION SYSTEM OF THE CARNEGIE FOUNDATION

WHILE a contributory system seems, both from the moral and the economic point of view, the right method of establishing pensions, this plan was for various reasons an impossible one for the trustees of the Carnegie Foundation to adopt. In the first place, the teachers in the separate colleges were not in the employ or subject to the influence of the Foundation. The inauguration of a compulsory contributory plan would have been impossible for any outside agency, and experience has shown how completely the voluntary contributory plan fails of its objects. Other weighty objections lay in the way. But even if they had been removed, an insuperable difficulty was presented by the form of the gift itself. By the terms of this gift, the income of the Foundation was to be spent in providing pensions for teachers who had served their generation unselfishly upon salaries which made a provision for old age almost impossible. To have begun a system of pensions which called forth at once an additional expenditure on their part would have been repugnant to the idea of the endowment.

The process by which the trustees were led to adopt the present rules and form of administration may well be set down here, since it will illustrate both the difficulties that had to be met and the methods that were adopted in the effort to deal with them.

The most far-reaching and important decision was with regard to the character of the pensions to be paid. The trustees decided at the beginning that these pensions should be of the stipendiary character,—that is to say, they should have relation to the salaries paid, and should represent a sufficiently adequate proportion of the active pay to enable the teacher on a pension to maintain a plane of living approximating that to which he had been accustomed. In accordance with the rule carrying out this idea—the retiring allowance being one-half of the average salary for the past five years, plus \$400—the teacher on a very low salary gets a much larger proportion of that salary as a pension than the teacher on a large salary. Thus a teacher receiving a salary of \$1200 receives as a pension \$1000, or 83 per cent of his active pay; a teacher on a salary of \$3000 receives \$1900, or 63 per cent of his pay; while a teacher on a salary of \$5000 (of whom unfortunately there are very few) receives a pension of \$2900, amounting to 58 per cent of his pay. As a matter of fact, the man on the highest salary is likely to find most embarrassment in readjusting himself to his diminished income.

This decision seems, in the light of experience, to be thoroughly justified. It would have meant little to offer to a man like William James or Hiram Corson a pension of a few hundred dollars, on the scale of the industrial pensions.

This decision, however, is more far-reaching than any other that was made, since, as was clearly pointed out in the First Annual Report, it sharply limited the number of pensions that could be granted. With pensions based on the principle of mere protection from actual want, it would be possible not only to pay a very large number, but it would be possible also to have great flexibility in the rules and to per-

mit of exceptions without serious consequences. I think, however, it is clearly admitted by all teachers that a few hundred adequate pensions at the service of teachers is far better than some thousands of very small pensions.

The trustees were thus led to the decisions that the system of pensions inaugurated by them should be upon a non-contributory and a stipendiary basis.

With these fundamental questions decided, the next step was the framing of rules under which the pensions to be paid on the basis determined upon should be awarded. Three plans were considered: (1) To use the income of the endowment to assist colleges in forming pension funds. (2) To receive applications from individual teachers in all colleges and vote as many pensions as the income of the endowment would furnish. (3) To admit a limited list of institutions to the permanent privileges of the pension endowment.

The first of these plans presented many advantages from the standpoint of the trustees and also of the colleges themselves. It relieved the trustees of any question of discriminating between different teachers. It provided a financial policy that involved no difficult questions. In the course of a long series of years it would have proved influential in the establishment of pension systems. On the other hand, the objections to this plan were so serious as to make its practical execution very doubtful. In addition to all these, the plan seemed clearly outside the scheme laid down by the founder of the endowment. His wish and instructions were to use the income in the payment of pensions for teachers. The contribution that the Foundation could have made for pensions under the first plan would have been merely the interest from its endowment distributed in gifts to college endowments, which would have established only from a dozen to a score of pensions each year. Even if such a solution had been legally possible, it would have been disappointing alike to the founder and to American teachers. Under the terms of the gift it seemed clear that the trustees must use the income of their endowment for the actual payment of pensions to teachers. The suggestion made to the trustees to distribute the endowment itself to the colleges was of course legally impossible.

There remained, therefore, two plans to consider,—a distribution to individuals directly upon their own application, or a distribution, under fixed rules, thru the colleges and universities with which the teachers were connected.

The first plan was again the easy and obvious one. It involved no troublesome question of discrimination as between one institution and another. It left the chaotic educational situation in America untouched. In addition, it involved no difficult financial and actuarial complications. The trustees would have needed simply to sit as a board, receive thousands of applications from teachers of all grades, and vote as many pensions as their income permitted to teachers scattered over the whole country.

The objections to such a solution are too evident to need cataloguing. It would indeed provide pensions to a few of the class for whom they were designed. But its

adoption would probably have rendered the general development of pension systems in colleges impossible for many years to come. The only recommendations of the plan were that it was easy and safe.

✓ The trustees in the end adopted the last-mentioned plan, under which pensions are paid to teachers in a selected list of colleges and universities. In coming to this decision, the trustees were influenced by the knowledge that this great gift had for its object not merely the paying of pensions, but the dignifying of the profession of teaching thru such pensions. In order to accomplish that result, it seemed necessary that the Foundation should be something more than a mere pension agency, — that it should have an educational character as well. ✓

In making this decision, the trustees realized that they were undertaking a difficult and delicate task, but they deliberately undertook this enterprise in the belief that thereby they would have in the end the greater opportunity to serve American education, and therefore serve every American teacher. The matter was set forth definitely in the first preliminary report to the trustees in the following paragraph (First Annual Report, pp. 15, 16): “The members of this Foundation are called upon to meet a series of questions which have to do with important educational tendencies and influences in this country. The establishment and maintenance of such a fund will be a very simple matter if no effort is made to deal with the question of educational standards, and if every institution which calls itself a university, a college, or a technical school is admitted to a share in its benefits. If, however, the Foundation is to be something more than a distributing agency, these important questions must be met and their solution attempted by the officers and members of this corporation; and the question which will be at once most interesting and important is educational rather than financial.”

✓ The next question that the trustees had to settle concerned the conditions upon which pensions should be granted. This necessarily involved the question of how many colleges could be admitted to share in the probable benefits of the endowment.

The answer to this question could be had only by a thorough actuarial study of the teachers in all the colleges likely to be eligible. It would have required years to make such a detailed study, and a first attempt at obtaining such information was made by collecting from the colleges such actuarial statistics as bore immediately upon the question. Even, however, when the best available material was brought together, it was clearly realized that the basis for a definitive actuarial analysis of the problem could not be established for years. ✓

In the First Annual Report there is given a résumé of the general estimates that were obtained as to the number of individual teachers at an assumed salary who could be pensioned under certain assumed rules. Pensions for widows were not included in this examination, but were subsequently added by action of the trustees.

✓ The rules finally adopted were framed in counsel with various advisors, — actuaries, administrators, teachers, and publicists, — whose general judgment was expressed in

these words: To make a pension system which shall be absolutely secure for all time to come would require placing so large a proportion of the fund into a reserve that it would seriously cripple the benefits which it can accomplish. Your best plan is to frame such rules as may seem to your board of trustees to minister most directly to the actual needs of teachers at this time, and to include in their benefits such institutions as the rough estimates which have been made would seem to justify, reserving carefully to the board of trustees the power to amend the rules in the future in such wise as experience may show to be necessary, and in the interest of the great body of teachers. In the mean time accumulate during the next eight or ten years the material for a careful actuarial study of the question of pensions for teachers, who form a class by themselves, with an expectation of life likely to be quite different from that used in any mortality table. Finally, have the courage to make the changes when they are necessary, for whatever actuarial advice you use, you are pretty sure in the end to be disappointed.

The rules of the Foundation have been administered practically upon this basis. The trustees have felt sure that it was better to establish a fair retiring allowance system in a limited number of colleges than a very poor system in a large number. A retiring allowance system in which the minimum age of retirement is sixty-five, with a fair assurance of certainty, is far preferable to one with a much lower retiring limit, but in which the possibility of retirement is uncertain. Under the light of such advice as they could get, the trustees have gone ahead to administer the Foundation upon this general principle.

I attempt to describe in the next sections the results to which our experience has so far led us.

SIX YEARS OF ADMINISTRATIVE EXPERIENCE

ANY study of the actual results attained by a philanthropic organization like the Foundation will naturally divide under two general heads: first, the results attained from the social and philanthropic point of view; secondly, the experience derived from the financial estimates and policy of the enterprise. The actual good that an agency may do is not necessarily directly related to its financial expectations and experience; nevertheless, the two are closely interwoven, and every such agency is accountable for its responsibility, both moral and social as well as financial.

The effort to describe the outcome even for a limited time of the efforts of such an agency is affected immediately by the point of view as to what such an agency can and ought to accomplish. Here was a great gift to a selected class of professional men and women; its benefits were secured without effort and without coöperation on their part. What are the moral and social results to be attained from the administration of such a gift? What are the needs of teachers that such a gift can meet? Under what circumstances ought a teacher to be pensioned, bearing in mind not only

his needs and his desires, but also his sense of independence? Under what conditions are teachers pensionable from the standpoint of the general welfare of society?

All of these questions came early before the trustees, and in the endeavor to frame suitable rules they sought to make all such rules as generous as possible. Such mistakes as occurred arose primarily out of the desire of every trustee to make the pension system as available to teachers as it could be made.

In the end, the trustees determined to award pensions to teachers upon two grounds: First, on the basis of age, at the minimum limit of sixty-five years. Secondly, a smaller pension was to be awarded after twenty-five years of service as a professor.

The actual working of these rules can be quite fairly described and judged from the experience of the six years that have elapsed. The teachers who have retired on the ground of age have averaged between sixty-nine and seventy years of age, a result that was anticipated, since sixty-five was expected to be only a minimum age limit. So far as the life of this Foundation has gone, its experience shows that a teacher does wisely to continue his work so long as good health and strength remain. In the first sensations of connection with a pension system, the idea of retirement at sixty-five has evidently presented itself as very attractive to a number of men, but the experience of the six years makes it clear that on the whole this age is probably too low a limit. This inference is borne out by the large number of applications from retired teachers who, after a year or two of absence from regular work, are ready and anxious to get back once more into the work of the teacher. The experience of six years enables the officers and trustees of the Foundation to realize, as they could not realize before, that the value of the pension to the man who approaches sixty-five lies not in the opportunity to escape from active work at that age, but in the protection afforded whenever the period of usefulness and strength has passed by. That teachers are realizing this more and more is also apparent. In the main, and so far as its general results go, this rule has worked well. It has worked no demoralization, and while some men to-day would be better off in their old places in the classroom than on the retired list, on the whole the rule has abundantly justified itself.

The experience with the second rule has already been fully described in the Fourth Annual Report. Under this rule any teacher who had been twenty-five years a professor and who was in an accepted institution could apply for a pension upon a schedule varying with the length of service. The rule was adopted by the trustees under the assumption that but few applications would be made under it, and that these would be in the main applications from men who were disabled for further service. The intention was in fact to use the rule as a disability provision. The outcome showed what might have been clearly foreseen at the beginning, that college presidents and college teachers can no more rise above the ordinary appeal of self-interest than other educated and intelligent men. After a few years of administration it was perfectly clear that the rule was doing harm rather than good. It was therefore repealed by the trustees in accordance with the authority that they had reserved in their hands,

and was converted into a definite disability rule for the benefit of those whom a physician's examination shows to be so far disabled as to be unfit for the work of a teacher.

The experience with this rule has served to throw some light upon the question as to what sort of man may rightly be pensioned from the income of such a gift, having regard alike to the responsibility of the trustees, the interest of the individual, and the rights of the public. For example, is it to the advantage of society and of education that a man in middle life, in the possession of health and strength, should be pensioned from a teacher's pension fund? It seems clear from the experience of to-day that no man ought to be pensioned under such circumstances unless his pension has been paid for by himself under a fair contributory system. It is neither for the well-being of society, nor for the advantage of the individual, that he should be given a pension at the most productive period of his life, merely because he has for twenty-five years been a teacher, however distinguished his service may have been in that field.

A similar question, and one long discussed by the trustees, arose in regard to the pensioning of men and women of comfortable means. The trustees were conscious of the responsibility that they owed as administrators of a gift intended for teachers who really needed its help; nevertheless, they felt that there was a most serious objection to attaching to the rules any condition that suggested a poverty discrimination in the assignment of pensions. Accordingly the rules have said nothing with regard to whether the teacher were poor or rich, in needy circumstances or well to do. It has left the question absolutely to the individual himself to settle. In most cases the pensions due under the rules have been applied for and accepted without regard to the circumstances of the individual. In several instances teachers have written that they would not apply for allowances because of their possession of an adequate or a modest income and of their feeling that in a gift such as this they should not take for their greater comfort pensions that would mean great relief to more needy teachers. Few such experiences, however, have come to the trustees.

While the trustees have sought, and rightly sought, to have teachers in the accepted institutions feel that the pension is a thing earned and not a charity, nevertheless it ought to be said that the acceptance of it does not stand quite upon the same basis as the acceptance of a salary, nor have teachers appreciated quite fully the fact that their own attitude toward this gift and its use would have its effect upon educational giving and the estimation that the world puts upon the motives and ideals of teachers. The Foundation would not in any respect diminish the feeling that the teacher in an accepted institution may accept the pension as a right, not as a favor. None the less, it still remains true that this is a free gift, and that the well-to-do man who accepts it thereby makes it impossible to extend the help of a pension to some one who really needs it.

To one who, from the nature of his duties, is compelled to see the darker side of

pension administration, who now and again is almost inclined to doubt the wisdom of any pensions save those obtained by the individual's own effort, the pensions that have been given to the widows of teachers present themselves as on the whole the most satisfactory and helpful that the Foundation has disbursed. The woman who is left in middle life with a helpless family to provide for is in no danger of being corrupted by the modest pension that she receives. To the older woman whose family responsibilities have been in a measure diminished, it still means the difference between dependence and independence. The pensions to widows have on the whole seemed to bring the largest measure of help and comfort with the smallest possible consequences of an undesirable nature.

In the main and speaking at large, the moral and social results of the pensions to teachers seem to me to have had a satisfactory result. Now and again the selfish side of human nature has appeared; there have been those who have been willing to look at this gift, not from the standpoint of its intended service to men and women of unselfish and useful life, but from the standpoint of how much they could get out of it. It has been discouraging at times to find men in the early fifties, in the prime of health and strength, applying for pensions upon trivial and selfish grounds in order to escape from teaching. But on the whole these instances have been no more numerous than must be expected from any group of educated men and women. It would be unfair to expect of the teacher a higher standard of unselfishness than of other professions. On the whole, the pensions, as they have been administered, have been used by men and women who have led useful and self-sacrificing lives, and who have come upon old age oftentimes with health broken and in nearly all cases with practically no financial support. But of all the fruitage of this giving, none has been quite so sweet as the gratitude and appreciation of the intelligent, devoted, self-sacrificing mother, who, left helpless with a family, has found in this assistance the means to educate and to establish in life the children for whom unexpected misfortune has made her alone responsible.

Looking back over the experience of six years, it is clear that the direct and immediate contribution of the endowment is the payment of a living pension to teachers who have really earned it by long service, and the payment of pensions to the wives of teachers who are left in straitened circumstances. It was perhaps inevitable that the trustees themselves and teachers generally should expect more of the endowment than any pension agency can perform. The somewhat hazy anticipation on the part of many of retiring in the fifties and spending the rest of their lives in a gentle exercise of literary art or of scientific research is visionary. The anticipation of college presidents that inefficient men could be disposed of by a pension has proven another delusion. The anticipation of the trustees that scientific research could be stimulated by a judicious use of retiring allowances seems to me to fall in the same category. And the reasons lie in the essential qualities of human nature and in the limitations of the things that money can do. If the endowment of the Foundation

were unlimited, it would still be a misfortune to pension teachers except on the basis of a life spent in teaching. To retire men in the fifties when they themselves get tired of work or the college authorities feel their services are no longer efficient would be equally demoralizing to the college and the individual. Complicated human problems cannot be solved by so simple a formula. Even the encouragement of research has proved a by-product very difficult of attainment. The idea that a man of fifty-five who has done no research for years will be quickened into activity by the freedom of a pension is without a true basis. On the other hand, if the man is active in research, he is better off in nearly all cases in continuing his university connection. The trustees realize to-day as they could not six years ago the limitations of such an endowment and its possibilities for harm as well as for good. So long as the income is used to pay pensions to teachers who have grown old and have passed the period of usefulness in the service, or to provide pensions for teachers who after long service are absolutely broken in health, or for the widows of such men, the expenditure does good, not harm. To go beyond this is to tread upon questionable ground. But the realization of this is something that only experience can show. No such experiment in pensions, provided by the free gift of one man, had ever been made before.

There is one by-product of the pension system of the Foundation that stands upon a somewhat different basis, namely, the educational service that the Foundation has sought to combine with the pension system. Of this I endeavor to speak in a later section.

I turn now to a consideration of the light that the experience of the last six years throws upon the actuarial and financial problems of pension administration.

SIX YEARS OF FINANCIAL EXPERIENCE

THE trustees who undertook the management of this gift entered upon a work for which there was little financial guidance from past experience. No such trust had existed before, and no one was wise enough to foresee either its social and moral effect upon the teachers themselves, or the financial load that would ensue upon any assumed theory of administration which involved the payment of definite pensions. The estimates of the cost of pensions for a given number of teachers were presented in the First Annual Report. These estimates were attempted from various points of view, such as the experience of pensioning army officers, the estimates from actuarial computations, and the like. All of these involved numerous assumptions as to the age at which teachers would apply for pensions, as to the possible increase of the salary lists, as to the mortality tables, and numerous other factors. The first statistics collected in 1905-06 revealed at once the preponderance of young men in the colleges and universities. The majority of teachers were below forty. As might have been anticipated, the state universities showed a smaller proportion of elderly men than the

endowed colleges. But even in these latter, the distribution of ages had no resemblance to that of a stationary population; that is to say, to one in which for a generation the accretions have balanced the withdrawals, the births balancing the deaths. The question whether this anomaly would continue for an indefinite period in the future was one that it was impossible to answer. In an extended period of time, with stable conditions in the colleges, it would naturally be assumed that the ages would more nearly approximate the conditions of a stationary population. On the other hand, during the whole of our college history, only a few of those who have entered college positions have remained permanently in college work, and as additions to the college staff come almost entirely from the ranks of younger men, the actuarial problem is one entirely different from that of the ordinary actuarial estimate. Even in our oldest colleges and universities this situation still holds. How long this condition of affairs will continue it is very difficult to estimate. Doubtless in a generation the staffs of our colleges will begin to adjust themselves somewhat more nearly to that of the stationary population. The tendencies will be in that direction. The greater security of the teacher's place will have its influence in inducing men to remain permanently in the profession of teaching. But how rapidly such a condition will come about is a question upon which we can only speculate.

The examination of the preliminary statistics at the beginning of the Foundation's work brought out many other interesting facts. For example, while the faculties of the colleges and universities were made up so largely of young men, there was noticeably in the older colleges a considerable group of quite old men who, in the absence of a pension system and particularly in the absence of any pensions for their wives, remained in active service. In the accepted institutions, and in a number of those not on the accepted list, these men have since been transferred to the pension roll of the Foundation, so that in a number of institutions to-day the proportion of elderly men is smaller and the average age of the members of the staff lower than it was six years ago.

The First Annual Report sets forth the rough estimates that were possible from the first statistics collected. It is now possible to make some comparison with these expectations.

The average estimated pension was there stated to be \$1450. The general average of all retiring allowances in force at the end of the year 1912, six years after the Foundation was established, was \$1676.66. This discrepancy is due to two facts,—first, to an actual general rise in salaries, and second, to the fact that the salaries in institutions on the accepted list, from which most of the pensions are drawn, are in excess of the average salary of the three hundred and more colleges upon which the original estimates were based. This difference will grow in the future as salaries rise, and will, of course, operate to diminish the possible number of pensions that can be granted from a stated income.

In the First Annual Report there was given an approximate estimate of the num-

ber of institutions and the number of teachers for whom pensions could be maintained. These estimates were sought not only from actuarial data, but also from a comparison of the experience of other pension systems, for example that of the army. The general conclusion there given was that a pension system approximating that adopted could be maintained at a cost of somewhere between 7 and 10 per cent of the salary roll, and that an income of \$500,000 would maintain such a system for a group of between 3000 and 4000 teachers.

From its first pension payment, on July 25, 1906, to the end of the fiscal year on September 30, 1912, the Foundation had distributed \$2,077,813.64 in retiring allowances and \$238,590.36 in widows' pensions, a total distribution of \$2,316,404. Of this \$1,650,035.42 was paid through the 72 institutions now on the accepted list; \$666,368.58 was paid to individuals connected with institutions not on the accepted list. Most of these latter grants were made during the early years of the Foundation. Now that its policy has matured and its funds are approximately used by the demand from the accepted institutions, no new grants are made to persons who are not connected with these institutions, except to the widows of those who have been in receipt of allowances.

In all, 429 retiring allowances and 90 widows' pensions have been granted. Of these 98 have terminated through the death of the recipients and 23 temporary allowances have expired, leaving 315 allowances and 83 widows' pensions now in force. The amount being distributed to these on September 30, 1912, was \$570,423.03 annually, the retiring allowances averaging each \$1676.66, the widows' pensions \$912.11.

In all, the benefits of the Foundation have been extended to teachers in 155 different institutions, including all of the 72 institutions on the accepted list, with two exceptions, and including also the following 79 institutions not on the accepted list:

Adelphi College, Brooklyn, New York; University of Alabama, Tuscaloosa; Alfred University, Alfred, New York; Allegheny College, Meadville, Pennsylvania; Antioch College, Yellow Springs, Ohio; Atlanta University, Atlanta, Georgia; Beaver College, Beaver, Pennsylvania; Berea College, Berea, Kentucky; Bethany College, Bethany, West Virginia; Bishop Spencer College, St. John's, Newfoundland; Brown University, Providence, Rhode Island; Buchtel College, Akron, Ohio; Butler College, Indianapolis, Indiana; Clemson Agricultural College, Clemson College, South Carolina; University of Colorado, Boulder; Cooper Union, New York City; Cornell College, Mt. Vernon, Iowa; Elmira College, Elmira, New York; Fisk University, Nashville, Tennessee; Franklin College, New Athens, Ohio; Furman University, Greenville, South Carolina; George Washington University, Washington, D. C.; University of Georgia, Athens; Grove City College, Grove City, Pennsylvania; Hanover College, Madison, Indiana; Hillsdale College, Hillsdale, Michigan; Hiram College, Hiram, Ohio; Howard University, Washington, D. C.; University of Illinois, Urbana; State University of Iowa, Iowa City; Iowa State College of Agriculture and Mechanic Arts, Ames; Jefferson Medical College, Philadelphia, Pennsylvania; University of Kansas, Law-

COST OF RETIRING ALLOWANCES IN ACCEPTED INSTITUTIONS

<i>Institution</i>	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12	<i>Expenditure for Salaries</i>	<i>Relation of Pen- sions to Salaries</i>
Amherst College.....	\$3,696.66	\$7,591.25	\$9,050.00	\$9,050.00	\$8,621.64	\$9,232.50	\$5,500	10.8
Beloit College.....	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	35,000	5.7
Carleton College.....	1,000.00	2,598.75	5,245.00	5,545.00	6,445.00	6,445.00	28,150	27.8
Case School of Applied Science.....	.....	1,787.50	1,650.00	1,650.00	1,781.66	3,230.00	60,205	5.4
Clark University.....	.....	.....	1,800.00	1,800.00	.....	.....	70,000	.....
Thomas S. Clarkson Memorial School of Technology.....	.....	.....	.....	.....	.....	.....	11,950	.....
Colorado College.....	.....	783.75	1,450.83	1,505.00	1,505.00	1,505.00	38,000	4.0
Columbia University.....	4,792.51	10,655.83	17,726.67	28,472.47	28,219.97	30,219.94	1,145,000	2.8
Cornell University.....	11,642.52	13,631.56	17,882.44	21,067.98	25,514.22	25,707.23	510,831	5.0
Dalhousie College and University.....	1,260.00	1,260.00	1,260.00	1,260.00	1,260.00	3,630.00	33,500	10.8
Dartmouth College.....	.....	180.83	1,930.00	2,685.06	5,950.00	10,150.00	155,000	6.5
Grinnell College.....	1,000.00	1,000.00	333.38	1,000.00	1,000.00	1,362.50	44,250	3.1
Hamilton College.....	260.00	.....	.....	.....	.....	.....	32,500	.....
Harvard University.....	5,426.68	14,827.50	18,938.08	34,080.53	38,753.96	45,355.32	841,970	5.4
Hobart College.....	325.00	1,300.00	1,525.00	2,200.00	2,169.69	2,909.37	21,657	13.4
Johns Hopkins University.....	1,200.00	1,200.00	2,250.00	2,757.50	4,883.33	7,550.00	211,013	3.6
Knox College.....	475.00	950.00	1,520.00	1,139.99	950.00	1,330.44	24,210	5.5
Lawrence College.....	500.00	500.00	500.00	500.00	500.00	239.12	34,000	.7
Lehigh University.....	2,063.76	2,881.65	3,425.00	3,425.00	3,425.00	3,425.00	107,000	3.2
Leland Stanford Junior University.....	1,615.01	1,180.42	169.16	366.67	3,300.24	2,200.00	365,000	.6
McGill University.....	158.33	2,670.83	2,980.00	7,925.02	10,410.58	10,448.52	225,000	4.6
Marietta College.....	441.67	1,050.00	1,060.00	1,355.06	2,160.00	2,160.00	22,670	9.5
Massachusetts Institute of Technology.....	.....	1,200.00	1,200.00	2,902.56	4,560.00	8,360.00	301,000	2.8
Middlebury College.....	.....	437.50	1,750.00	1,750.00	1,750.00	1,750.00	20,160	8.7
Mount Holyoke College.....	.....	1,123.17	1,730.00	1,730.00	1,730.00	2,000.98	81,000	2.5
New York University.....	.....	.....	1,136.67	2,630.00	5,180.00	5,180.00	220,000	2.4
Oberlin College.....	836.65	4,900.00	4,570.00	4,420.67	3,250.00	3,368.33	128,400	2.6
University of Pennsylvania.....	.....	.....	1,175.00	3,175.00	3,175.00	5,350.83	433,311	1.2
University of Pittsburgh.....	.....	425.01	1,962.50	2,750.00	2,750.00	3,212.56	76,617	4.2
Polytechnic Institute of Brooklyn.....	1,212.50	4,850.00	4,850.00	4,150.00	4,150.00	4,150.00	43,150	9.6
Princeton University.....	6,150.00	5,974.58	7,165.00	7,614.52	11,255.27	10,547.26	308,650	3.4
Radcliffe College.....	.....	.....	258.33	5,700.01	5,500.00	5,500.00	53,000	10.3
Ripon College.....	2,000.00	2,000.00	2,000.00	1,745.85	1,500.00	1,080.54	20,900	5.2
University of Rochester.....	.....	980.00	3,720.00	3,720.00	3,720.00	3,720.00	45,000	8.8

Smith College.....	400.00	.....	887.50	4,735.27	5,248.33	6,902.22	177,150	3.9
Stevens Institute of Technology.....	4,608.27	8,375.00	11,075.00	9,115.00	9,279.58	10,511.85	68,000	15.2
Trinity College.....	1,200.00	1,200.00	1,200.00	1,200.00	1,457.53	2,230.00	36,250	6.2
Tufts College.....	2,262.50	3,085.83	3,300.00	2,624.87	2,320.00	2,320.00	104,600	2.2
Tulane University of Louisiana.....	2,678.33	10,651.66	14,238.33	15,640.00	14,531.64	11,640.00	146,000	8.0
Union University.....	1,450.00	1,450.00	725.00	725.00	1,569.25	1,405.00	60,159	2.3
Vassar College.....	168.75	2,025.00	2,025.00	2,025.00	4,067.08	4,072.50	129,500	3.1
University of Vermont.....	.....	1,600.00	1,400.00	1,400.00	2,386.26	2,715.00	60,000	4.5
Wabash College.....	.....	.....	.....	.....	885.01	1,180.00	23,550	5.0
Washington and Jefferson College.....	3,151.26	3,005.00	3,005.00	2,648.30	3,361.67	1,935.00	84,500	5.6
Washington University.....	900.00	3,900.00	3,900.00	4,820.39	6,860.00	7,435.00	114,034	6.5
Wellesley College.....	.....	157.50	630.00	1,005.00	2,923.17	2,620.00	136,586	1.9
Wells College.....	1,460.00	3,260.00	3,461.25	4,065.00	4,065.00	4,065.00	21,150	19.2
Western Reserve University.....	3,225.00	3,225.00	3,225.00	3,225.00	3,225.00	3,225.00	116,141	2.8
Williams College.....	.....	.....	1,325.00	5,300.00	5,775.03	7,200.00	95,000	7.6
Worcester Polytechnic Institute.....	.....	455.00	1,820.00	1,820.00	1,820.00	1,820.00	61,107	3.0
Yale University.....	14,960.00	20,538.75	27,523.75	34,652.06	36,823.32	41,523.64	524,577	7.9
Bates College.....	333.37	1,890.01	2,855.00	3,855.00	2,755.00	2,755.00	26,500	10.4
Dickinson College.....	.....	.....	.....	313.94	1,986.23	4,625.00	37,576	12.3
Bowdoin College.....	.....	1,025.00	1,880.00	2,125.00	2,615.00	2,615.00	39,550	6.6
Central University of Kentucky.....	.....	1,837.50	4,705.40	4,655.00	4,655.00	4,655.00	21,327	21.3
University of Cincinnati.....	.....	1,103.78	4,331.66	5,498.28	4,665.00	3,665.00	123,141	3.0
Drake University.....	.....	853.36	1,280.00	1,280.00	2,373.75	3,380.00	67,849	5.0
Drury College.....	.....	643.95	2,065.00	2,065.00	2,065.00	2,065.00	21,000	9.8
Franklin College of Indiana.....	.....	80.83	1,289.58	2,888.33	3,805.00	4,062.50	15,000	27.1
Rose Polytechnic Institute.....	.....	.....	780.00	1,040.00	1,040.00	1,040.00	31,900	3.3
Coe College.....	.....	.....	583.33	1,512.50	1,556.75	2,140.00	20,989	10.2
University of Michigan.....	.....	.....	536.67	3,610.00	5,480.00	10,867.58	536,000	2.0
University of Minnesota.....	.....	.....	1,340.00	4,705.00	6,717.50	12,200.25	263,000	4.6
University of Missouri.....	.....	.....	1,900.00	7,057.08	10,914.13	9,585.00	239,110	4.0
Swarthmore College.....	.....	.....	.....	4,212.50	4,350.00	4,350.00	55,335	7.9
University of Toronto.....	.....	.....	.....	.....	.....	.....	324,000	.....
University of Wisconsin.....	.....	.....	1,913.75	8,130.00	9,185.53	8,605.00	489,810	1.8
University of California.....	.....	.....	.....	3,686.30	12,472.53	15,585.00	408,000	3.8
Indiana University.....	.....	.....	.....	.....	.....	241.74	129,000	.187
Purdue University.....	.....	.....	.....	250.00	1,000.00	1,000.00	128,920	.8
Wesleyan University.....	.....	.....	.....	1,281.32	3,075.00	3,075.00	65,000	4.7
University of Virginia.....	.....	.....	.....	.....	3,060.08	9,350.82	122,960	7.6
Totals.....	\$85,163.77	\$160,188.29	\$228,964.26	\$325,199.02	\$388,619.33	\$441,984.64	\$10,904,165	4.1

rence; State University of Kentucky, Lexington; Lafayette College, Easton, Pennsylvania; Lake Erie College, Painesville, Ohio; Lake Forest College, Lake Forest, Illinois; Lemoyne Normal Institute, Memphis, Tennessee; Lombard College, Galesburg, Illinois; University of Maine, Orono; Marion Military Institute, Marion, Alabama; Massachusetts Agricultural College, Amherst; Miami University, Oxford, Ohio; Mills College, Mills College, California; University of Mississippi, Oxford; University of Montana, Missoula; University of Nashville, Nashville, Tennessee; University of Nebraska, Lincoln; University of New Brunswick, Fredericton; University of North Carolina, Chapel Hill; North Carolina College of Agriculture and Mechanic Arts, Raleigh; University of North Dakota, Grand Forks; Ohio University, Athens; Ohio State University, Columbus; Olivet College, Olivet, Michigan; University of Oregon, Eugene; Oregon Agricultural College, Corvallis; Pacific University, Forest Grove, Oregon; Park College, Parkville, Missouri; Pennsylvania State College, State College; Pritchett College, Glasgow, Missouri; Randolph-Macon Woman's College, Lynchburg, Virginia; Roger Williams University, Nashville, Tennessee; Rollins College, Winter Park, Florida; School of Mining, Kingston, Ontario; University of South Carolina, Columbia; South Carolina Military Academy, now The Citadel, Charleston, South Carolina; Susquehanna University, Selinsgrove, Pennsylvania; Tabor College, Tabor, Iowa; Talladega College, Talladega, Alabama; University of Tennessee, Knoxville; Transylvania University, Lexington, Kentucky; Virginia Military Institute, Lexington; Virginia Polytechnic Institute, Blacksburg; Washington and Lee University, Lexington, Virginia; Western College for Women, Oxford, Ohio; West Virginia University, Morgantown; William and Mary College, Williamsburg, Virginia; Wofford College, Spartanburg, South Carolina.

Allowances were also granted to persons connected with the Federal Bureau of Education and of Ethnology, the Carnegie Institution of Washington, the Council of Higher Education of Newfoundland, the Department of Education of Prince Edward Island, and the Southern Education Board.

The table on pages 88, 89, presents the payments made thru the 72 institutions on the accepted list, with the payments for the last year compared with the expenditure for salaries of the instructing staff as this was reported by each institution and printed in the Second Bulletin in 1908. Various changes have, of course, occurred in institutional salaries since that date, but not such as to change greatly the general ratio between them and the pensions.

The results show that for the accepted institutions, which have for some time made use of the pension system, the cost now amounts in general to about four per cent of the instructional salary roll.

The difficulty of obtaining accurate statistics from so many institutions organized under such varying conditions is much greater than one would imagine. It has taken about one year for the Foundation to obtain from the institutions on the accepted list the actuarial and financial statistics necessary to afford a fair basis for future

computations. In addition, the statistics gathered in 1905 are not strictly comparable with those gathered more recently. Both the officers of the Foundation and the college authorities had to gain not only knowledge of what was required, but also experience in obtaining the desired data with accuracy. A comparison of the lists of teachers offered in 1905 with those in 1911 shows, however, two tendencies, both of which work to increase the pension load above the estimates. The first is the actual growth in the number of teachers. This is by no means so great as has been supposed. The increases in instructing staffs have come in the main in the grades of assistant and instructor. The faculties have increased in these five years but little. Another process has gone on, however, which was perfectly natural and perhaps inevitable, with the effect also of increasing the load above the estimates. In the accepted institutions there has been created a very natural desire to bring every man in the institution under the pension system. Titles have therefore been adopted to conform to the definitions of the rules of the Foundation, so as to make eligible in name many more men in most institutions than the rules were originally designed to include. Where the title of the permanent expert employed in the institution did not nominally bring him under the retirement rules, the tendency has been to change the title to one that conformed with the requirements of the rules for retirement. Practically the only men of expert character who hold permanent positions and who are now specifically excluded are those holding non-teaching places of a business character and those teachers in professional schools who engage in the outside practice of their profession. All institutions have sought to include practitioners of dentistry, pharmacy, physical training, engineering, medicine, and music, as well as a large number who have no fixed academic rank, such as custodians, curators, and library and office assistants of all kinds. In one institution nearly one hundred names have been added to the list originally furnished, merely by change of title. How much the eligible list has been enlarged by this process, it would be difficult to say, but the process has operated to swell the number of those nominally in line for a pension, provided they afterward comply with the conditions of service and age. Here again, however, one deals with a matter that cannot be settled on a strictly actuarial basis. The real purpose of the Foundation is to serve the teachers in these institutions. The extent to which it can go in seeking to accomplish this end is something that experience alone can determine.

In such actuarial computations as were originally made, the mortality table of the English Institute of Actuaries was employed. In the later computations, the McClintock table of mortality, derived from the lives of annuitants, was employed. As set forth in the Fourth Annual Report, the differences between the two are not great in the ages above sixty-five. The mortality experience of the Foundation has, of course, extended over a very few years. Up to this time the mortality has fallen below even the McClintock tables. Whether this indicates a lower rate of mortality for teachers can be determined only by the experience of a larger number of years. The subject of the mortality for teachers is one which has received some attention at the hands

of actuaries, but concerning which there is still little definite information. Furthermore, it is not at all sure that the lives of teachers in the public schools, for example, are comparable in length to those in colleges and universities. In this connection the experience of the pension system for the government school teachers of Great Britain is of interest. The system embraces all teachers in government schools in Great Britain and provides for an actuarial examination and report every seventh year. The last actuarial report in 1907 brought out a startling discrepancy between the computed death rate and the actual death rate. The discrepancy is set forth in the following table according to the tables of the British Institute of Actuaries:

	<i>Actual Deaths</i>	<i>Death Expectation</i>
Men	10.71	22.25
Women	8.72	23.97

The actuary very well says: "These results are startling," but, as he points out, the discrepancy is probably due in part to the insufficiency of records and the omission of deaths which have occurred, particularly among younger teachers. Certainly, computations which are as wide of the mark as these serve no purpose whatsoever as a basis of actuarial computation. In spite, however, of the mistakes which probably are inherent in the figures, they illustrate one of the uncertainties of dealing with the pension problem. This factor also has operated to increase the Foundation's load above its estimates. The growth of the load coming from the accepted institutions is shown in the following table:

<i>Year</i>	<i>Number of Institutions</i>	<i>Total Number of Pensions in Force at End of Year</i>	<i>Annual Cost of these Pensions</i>
1906 ¹	52	51	\$77,935
1906-7	55	89	129,855
1907-8	62	135	203,290
1908-9	67	205	313,985
1909-10	71	237	382,120
1910-11	72	267	425,105
1911-12	72	297	478,440

From this table it appears that the Foundation is now paying at the annual rate of \$478,440 for pensions in the 72 accepted institutions. Its total income, when the whole of the gifts already made to it by the founder are paid in, will amount to approximately \$800,000. In other words, about sixty per cent of the income at present available is now used by the accepted institutions. In time this limit will, of course, be reached. When that time comes, if the endowment is not increased, the rules will of necessity have to be modified to meet the conditions; in other words, the age of retirement will have to be raised.

Some light on the ultimate possible load which may arise from pensions in the

¹ July 1 to September 30.

accepted institutions is afforded by an examination of the careful statistics just gathered by the Foundation at the end of the first five years of its history. The collection of these statistics and the necessary correspondence incident to obtaining them in definite form occupied about one year. They are applicable as of date June 30, 1911. At that time there were 72 institutions upon the accepted list. There were, however, only 71 separate groups of instructors, since Radcliffe College has no separate faculty.

In these institutions there were, on the date mentioned, 5025 teachers in active service, including all professors, assistant professors, and instructors who may ultimately claim pensions. Of those, 494 or 9.8 per cent were women, and 4531 or 90.2 per cent were men. The load which may come upon the Foundation from the two differs. In the case of a male teacher the probability of a pension for a widow as well as for himself is involved. This is what the life insurance companies call a joint risk. The two classes would therefore need to be considered separately.

The average retiring allowance granted to a male teacher in the accepted institutions during the past six years has been \$1883, the average allowance to a woman teacher retiring under the same rules has been \$1202, the difference being due entirely to difference in salary. Excluding the women teachers, and excluding also the 78 male teachers who are already over sixty-four and are therefore eligible to retirement if they should apply for it, there remains a body of 4453 male teachers, all less than sixty-five years of age, and all occupying positions the retention of which until sixty-five would entitle them to retiring allowances.

The distribution of this body of teachers according to age is shown in the following table:

MALE TEACHERS IN ACCEPTED INSTITUTIONS

<i>Age</i>	<i>Number</i>	<i>Per cent of Total</i>
20-24	86	1.9
25-29	575	12.9
30-34	894	20.1
35-39	904	20.3
40-44	715	16.1
45-49	550	12.4
50-54	359	8.1
55-59	211	4.7
60-64	159	3.5
Total	4453	100.0

This analysis exhibits the same characteristic that has been already mentioned—the preponderance of young men. More than half of these teachers are below forty.

To make these figures available for an actuarial estimate, a number of assumptions would have to be made concerning the rate of additions by new appointments and of subtractions by death or resignation. These can be known with certainty only by records extending over a term of years. The prevalence of young men in such numbers in our institutions of learning is involved with many other factors of our social

and industrial life. A very large proportion of men in the lower grades of the teaching staff look upon teaching, and will for many years continue to look upon it, as a stepping-stone to other professions. Such crowding of younger men is characteristic also of any rapidly increasing population of a country or city, altho in our older colleges there would seem to be no such *a priori* explanation for the great divergence of the age distribution from that of a normal stationary population. Some light can be thrown on the question by the computation of the possible load under the assumption that the number of male teachers remains for a generation at precisely its present number, that none of the teachers resign, and that withdrawals from the group occur only by death or by survival to the age of sixty-five. Should this situation continue for a generation, so that the group of teachers embraced in these faculties and instructing staffs assume the position of a stationary population and retirements continue to be made as they have in the past at the average age of sixty-nine, an annual load of \$1,375,000 a year, including all women pensioners as well as men, would ensue. The nature of the problem will be learned only as trustworthy statistics are accumulated over a period of years. This the Foundation will make it its business to do. The problem is only partially an actuarial one. The duty of the trustees is to use the endowment committed to them, or such as may be committed in the future, in such manner as to serve best the faithful and deserving teacher, to use every care that the endowment shall do good, not harm, and to have the courage to make from time to time such changes as experience may show to be necessary, with as little disappointment to the expectations of possible beneficiaries as the nature of the problem will permit.

THE EDUCATIONAL FUNCTION OF THE FOUNDATION

ALTHO realizing that the primary work of this board has been the payment of pensions to teachers under such provisions as were found to be wise, the trustees have from the beginning devoted a small proportion of the income to educational studies and to their publication. In some ways this by-product of the pension fund has been more prominently before the public than the primary purpose of the endowment. While it has encountered both praise and criticism, the trustees have clearly realized the responsibility of the board in undertaking this work, and I endeavor to state below the reasons that have influenced them in their action.

The immediate reason for devoting time and money to these educational studies, at least during the earlier years of the Foundation, arose out of the conviction that only by such scrutiny of education in the United States and Canada could the board perform wisely its duty in the distribution of pensions. I have already described in detail the course of reasoning by which the trustees felt justified in selecting certain institutions whose professors should most directly share in the pension endowment.

But nothing was said in this connection concerning the confusion that then existed, and which still exists to a large extent, in American education, and which was then illustrated by the fact that altho the Foundation was by its charter limited to payments to teachers in colleges and universities, the terms "college" and "university" had no definite meaning throughout the country. In fact, six years ago the large majority of the institutions doing work under the name "college" or "university" were neither colleges nor universities under any educational definition that would have been accepted by scholars generally.

The confusion lay much deeper than the mere use of names. The colleges and universities in the various states had no conscious relation to the educational systems of their states. Most of them recognized no obligation to the general system of public schools, and except in a few states the colleges and universities did not aim to have any relation to the public school system. No one could view this situation without being impressed by the fact that a few simple educational conceptions would go far to clarify the situation, and it was equally clear to the trustees of the Foundation that to distribute pensions to colleges indiscriminately, whether they were engaged in college work or high school work, was to do harm rather than good to the cause of education, was to belittle rather than to dignify the profession of the teacher. In a word, the trustees could take one of two positions: either the educational confusion was none of their business, and they would not undertake to discriminate between colleges along educational lines, or they could face the actual situation and undertake to discriminate between the colleges that were doing educational work of real college and university¹ grade and those that were not. The trustees conceived their duty to lead them to the choice of the second alternative. They were convinced that an educational scrutiny of colleges, universities, and educational conditions in general was necessary for the right administration of the pension fund itself.

Having decided to make such studies, it seemed equally clear to the trustees that it was their duty to make their results known to the world. The Foundation has sought from the beginning to make all of its proceedings public.

A second reason that had weight with the trustees in deciding that the Foundation should assume an educational function arose out of the absence of any educational agency having to do with education as a whole throughout the United States and the Dominion of Canada. It is true that there is a commissioner of education of the United States government, and that there is an effort to enlarge the functions of this commissioner. It seemed clear, however, that there was a place and an educational service for an advisory institution that had to do with education from the standpoint of the whole continent, rather than from the standpoint of a single institution or province or state.

This conviction was strengthened by the sharp rivalry that existed at that time, and still exists to a lessened degree, between institutions of learning. It was believed that an institution interested alike in all colleges and universities, rather than in the

success merely of this or that institution, had some advantages in the point of view from which it might approach educational questions.

A third reason lay in the fact that the Foundation, having been the gift of one man, with large endowment, with no constituency to depend upon, would have a somewhat unusual independence and freedom in the publication of educational studies, a freedom that might be lacking even to a government bureau.

This is well illustrated by the two reports on medical education that have been issued by the Foundation, the first dealing with medical education in the United States and Canada, the second with medical education in Europe. One can hardly imagine that any government agency would feel justified in printing so frankly as was done in these reports, the ascertained facts concerning the institutions represented. Certainly, neither a government bureau nor a private institution like a university would have cared to face the uncomfortable task of printing the truth about these schools, least of all when it was realized that some of the worst existed under the shelter of colleges and universities that bore honored names. The trustees believed that in the point of view which is occupied by the Foundation and in the publicity it felt itself able to give to its results, such a detached agency had advantages for educational discussion that few other agencies were likely to have.

It was out of such considerations as these that the trustees felt justified in assuming an educational function, and in spending a small part of their income in its development. Whether they were justified in this decision must be settled, after a fair period of time, by the general judgment of men who know education. It was inevitable that such work would produce a certain amount of criticism of the Foundation, and those who have had most directly to do with the work itself have sought to profit by such criticism. No such agency can object to fair-minded criticism from any source. On the contrary, those who are responsible should seek to profit by the independent judgment of other men. There are, however, one or two misapprehensions concerning the educational work of the Foundation to which I venture to allude.

While the Foundation has been compelled, under its conception of its duty, to discriminate between institutions, it has used the utmost care to interfere in no respect with their freedom or their independent development. In the admission of institutions to the accepted list, only the most general standards of judgment have been used,—those that have been approved by the common judgment of the teachers of the country. Practically the only requirement upon which the Foundation has insisted for the admission of institutions to this list is the maintenance of such reasonable standards of college work as have been practically accepted by all colleges, together with a sympathetic relation to the general system of education of the state and of the region in which the college is located. These conditions are so plainly the common judgment of all men connected with education, that if any basis of discrimination is to be made at all, none more simple or more just could be found. Such criticism of educational matters as the Foundation has felt justified in making has referred quite

as much to the institutions that were admitted to its benefits as to those that were not, and the Foundation has sought uniformly and in every way to avoid any interference with the freedom or development of the institutions with which it is connected. I feel sure that no college professor in these institutions has been conscious of any new pressure upon him arising from the relation of his college to the Foundation.

The problem of discriminating between institutions, and yet of interfering in no way with their freedom and development, has not always been entirely a simple one. The difficulties may be illustrated by reference to the matter of academic freedom, which has again and again been brought to the attention of the Foundation, generally by the action of some professor in a college or university, who claimed that his freedom of action was interfered with, and who asked the assistance of the Foundation in his defense. It is a somewhat interesting fact that the men who are quickest to condemn interference from outside agencies in academic matters are oftentimes the most ready to use such agencies themselves if they can be successfully invoked.

The answer of the officers of the Foundation to such appeals has uniformly been that such internal affairs of an institution as the relations between an individual professor and his institution were matters with which the Foundation had nothing to do; they lay between him and the authorities of the institution itself. Lest this illustration might lead to the inference that cases of interference with the freedom of professors were common in American colleges, I venture to add the statement that such communications came, in nearly all cases, from institutions of low grade, in communities where the idea of a university or a college was still unformed, and where the tenure of office of a professor had always been insecure. Even in these cases, the correspondence revealed the fact that the trouble arose in the case of many individuals from an exaggerated idea of their own importance and their own services. Into such individual questions the Foundation has never permitted itself to enter. On the other hand, where a wholesale dismissal of teachers has taken place, as in the University of Oklahoma, or in the case where a deserving president has been dismissed, as in the University of Florida or the University of Alabama, the Foundation has sought to serve its function by ascertaining the facts as completely as it could from all parties interested and then publishing them. Such publicity is, in fact, the only power that the Carnegie Foundation has the ability to exercise. The thing that many colleges and universities find hardest to endure is the frank publication of the actual facts concerning them. The very first fact that was impressed upon the officers of the Foundation when they began their studies was that the catalogues of even reputable institutions seldom afforded a fair estimate of their educational services.

Following the plan that it outlined some years ago, the Foundation hopes to continue its studies of education. It has in preparation and nearly ready for the press a first bulletin on agricultural education. The preparation of a study of legal education has been begun, as has also a similar study on the training of the teacher in the United States and Canada. Similar studies are planned for the graduate school. Two bulle-

tins have already been issued upon medical education. It is hoped that a third may in time be published having to do with dentistry, the training of nurses, and certain callings intimately related to the practice of medicine. It is hoped also that the Foundation may be able to keep such studies alive by a reëxamination of the ground at the end of a term of years. For example, an examination of medical education five or ten years after the first report cannot fail to be of great service. The value, in fact, of such an educational agency will depend not upon isolated studies which stop with their publication, but upon a continuing study kept alive by the work of an enthusiastic and skilled staff.

I venture also to point out still another feature of these studies which ought not to be lost sight of, namely, that in whatever department of educational endeavor a study has been made, the coöperation of those who are most competent in these fields has been enlisted. For example, in the training of teachers, and the study of agricultural education and of legal education, the Foundation has sought the assistance of the best minds working upon these problems. In the medical bulletins already published, the work was done in coöperation with the most distinguished scholars in both America and Europe. The results that have been published, therefore, have been by no means merely the pronouncement of a single individual or of a small group of individuals; they have endeavored to express, on the other hand, the results of a consensus of opinion on the part of the best authorities upon the subject. The office that the Carnegie Foundation has supplied has been chiefly that of suggesting the point of view, and that point of view has been always the interest of education from the standpoint of the nation and of the race, rather than the interest of an isolated school or an ambitious university. I apprehend that whatever may have been the shortcomings of the papers that have been issued, it will still remain profitable to make such studies from such a point of view.

PART II
CURRENT EDUCATIONAL PROBLEMS

COLLEGE ENTRANCE REQUIREMENTS

THE perplexing questions involved in the transition of youth from the secondary school to the college have occupied much space in previous reports of the Foundation. These questions are still the perplexity of every college and of every faculty. In no other country does the boundary between the secondary school and the college present such a spectacle as it presents with us. In other countries the transition is a natural and an easy one. With us, the border line between the secondary school and the college resembles nothing so much as a species of border warfare.

In the effort to deal with these problems the Foundation adopted, at the beginning of its work, the four-year high school as the only common basis upon which colleges were likely to unite as a means of preparing for college, and it introduced a simple method of estimating the contents of the high school curriculum. This action was nothing other than the adoption of the practice of the better colleges and universities and of the stronger associations which deal with education, such as, for example, the College Entrance Examination Board.

The principle upon which the measurement was based rested upon the fact that during each of his four years in the high school a student could pursue steadily three or four studies at one time, and would accumulate, therefore, on the average, fourteen such study units during his four years' course. The chief advantage of using these units at the time lay in the fact that after their acceptance by the various colleges and universities and secondary schools, they formed a common means of estimating the high school curriculum. High schools in one state offered courses one or two years lower than the high schools of another state. There was no common measure for comparing the work done in one school with the work done in another. Three years of English, for example, in the high schools of one state might not be comparable in any respect to three years of English in high schools of another state. The employment of these units not only enabled a comparison to be made, but has constituted one of the influences making toward uniformity of the high school curriculum, so far as the matter of scholarship is concerned.

These units have now served their main purpose. They were never intended to constitute a rigid form of college admission, but merely a means of comparing high schools. Already the progress in this matter has been so satisfactory that the general conception of college admission no longer contemplates a certain number of units, but the completion of a satisfactory four-year high school course.

In no part of the country has the rise in college standards been more noteworthy than in the South, and in no other region has this been accompanied by a more satisfactory upbuilding of the secondary schools. This advance has been admirably assisted by the stronger universities and colleges. In some cases this has required the abandonment of a traditional policy long maintained. Thus the University of Virginia, from its beginning, had maintained the policy of admitting students with the utmost

freedom to its classes, depending upon examinations later to exclude the unfit. The university sacrificed this freedom in order to help forward the conception of an harmonious educational system in its state and in its region. The Association of Colleges and Preparatory Schools of the Southern States also added great vigor to the movement by its support.

On the whole, therefore, it may be said fairly that in the last six or eight years the problem of admission to college has been much simplified. First, by a greater uniformity of requirements on the part of the college; second, by the general acceptance of the four-year high school as the preliminary for college; and lastly, by the upbuilding, throughout the whole country, of secondary schools fitted to prepare boys and girls for college. There is to-day, among the great bulk of colleges that have any claim to consistency, a nearer approach to uniformity in the intellectual standard required for entrance to college than ever before, and there are far more secondary schools throughout the country fitted to prepare students for college than ever before. These results are of the greatest importance and significance.

Progress toward fair standards of preparation for professional schools has also been noteworthy, altho not so satisfactory as in the case of the colleges. One great gain has been that our best universities and colleges have purged themselves of the low grade professional school that formerly existed. There still remain a few university schools of law and medicine that require only high school preparation, but the university or college which maintains such a school does so in the face of educational public sentiment.

Low grade law schools and medical schools still flourish, however, as independent commercial enterprises. Such professional schools can still be conducted so profitably thru advertising and other commercial methods, that there remain men attracted to their exploitation for the sake of the gain, and there are also large numbers of young men desirous of obtaining speedy entrance into what they conceive to be lucrative professions, who are ready to pay their money to such enterprises.

This is particularly true in law, a field in which even the best schools need a less elaborate equipment than do the schools of medicine, and in which admission to practice is not conditioned upon sound professional training. Improvement in these matters can come only as public opinion in the various states is educated to the necessity of adequate laws. This movement is advancing, and within a short time several states have enacted laws requiring more satisfactory training as preliminary to the practice of law and to the practice of medicine. It is much harder to enact sound legislation in the case of applicants for admission to the bar than in the case of applicants for admission to the practice of medicine, for two reasons. First, there is an impression that an ignorant lawyer may do less harm than an ignorant practitioner of medicine. In the second place, the law-making bodies of all the states are made up, in the main, of men engaged in the practice of law, who see no reason for any higher standard than that under which they themselves have succeeded.

The standards for professional training in other callings, such as those of applied science, are in most parts of the country on the same plane of intellectual requirement as is demanded for admission to college. Most technical schools require the equivalent of a four-year high school preparation, accepting, however, somewhat different subjects from those ordinarily required by the colleges. An exception to this general statement is found in the southern land-grant colleges, which carry on a lower grade of technical teaching and are content with low entrance requirements.

Looking over the progress made in standards of professional education in the last six years, however, one must admit that the conditions have enormously improved, and that, best of all, a sentiment has been created which will, in the future, work for reasonable standards and for their honest enforcement.

It is one thing, however, to announce entrance requirements equivalent to the completion of a good four-year high school course, and another thing to enforce such requirements. The difficulties of the situation are still reflected in the great number of special students and of conditioned students in all of the colleges, whether they admit by certificate or by examination.

In former reports, much space has been devoted to an effort to obtain a clear conception and uniform meaning of the terms "special student" and "conditioned student." This needs still further attention, particularly in the smaller colleges and universities. It will be a righteous practice on the part of every college to print frankly its list of conditioned and special students, and to show clearly who are included under each designation. The subject has been dealt with so completely in the Fourth Annual Report that I can do nothing further than refer again to the discussion there.

The special student really belongs to a period whose educational status is different from that of to-day. The conditioned student presents an entirely different problem. The former comes from a class who, ostensibly at least, did not have the opportunity to attend a good high school; the latter comes from a class who did enjoy this opportunity, but failed to complete the work satisfactorily. The two classes need to be dealt with upon entirely different grounds. To the special student status should be admitted only mature students who have lacked the opportunity for the ordinary preparation. The presence in colleges, under the name of special students, of seventeen and eighteen year old boys, sometimes bearing well-known names, who come from communities where there are excellent public and private schools, forms *prima facie* evidence that the college is paying more attention to numbers than to its responsibility to the particular student himself and to the other students.

During the evolution which has gone on in the last few years, two distinct tendencies relative to the subjects required for entering college have been noticeable. On the one hand, there has been strong pressure upon the colleges to accept for admission every subject taught in the high school. On the other hand, this very pressure has made some colleges more rigid in their requirements than would be the case otherwise, for the reason that in institutions which attempt intensive work along a

few lines the preparation for such work is necessarily more restricted. It is not easy for the conscientious college to steer between the extremes of an absurdly large list of entrance electives and no electives at all, but that is practically what the college to-day is asked to do. The belief that any subject is the equal of any other subject in its contribution to intellectual development is widespread. In some ways it is a very natural reaction from the rigidity of the old methods, and in the long run the problem will probably be settled by some simplification of the high school course and the adoption of a reasonable list of entrance electives on the part of the college.

This situation has been much complicated by enthusiasts, bent upon introducing some new subject into the school curriculum by placing it amongst the college entrance requirements. Such an attempt has its serious disadvantages as well as its good qualities. There is need for good sense and liberality on both sides. Thus the colleges of the traditional New England type perhaps go to one extreme when they refuse recognition to any so-called vocational subject when presented for admission, no matter how well taught. A university, however, perhaps goes to the other extreme when it prescribes a vocational subject for admission. The schools should not be coerced thus from above.

Agriculture, as a secondary school subject, is now showing great vitality, and undoubtedly the question of its acceptance for admission by the state universities will soon be general. Here again the study can take care of itself in the secondary school without any forcing process on the part of the university. It will be time enough to recognize agriculture in the secondary school when it has passed the awkward and transitional stage, and has demonstrated its value in intellectual training.

Perhaps, however, the most conspicuous attempt to govern the school curriculum thru college entrance requirements is afforded by the action of the colleges in the matter of Latin. For example, Yale University no longer requires candidates for the arts degree to study Latin in college, but they must study it for four years in order to get into college. Hence come many of the conditions among the Yale freshmen. The question naturally arises, since the college no longer requires the study of Latin of any student after admission, why it should require him to spend one-fourth of his high school course on this particular study. For no American boy, under the methods pursued by us, gains in four years a knowledge of Latin sufficient to enable him to read the language.

Bowdoin, Columbia, Dartmouth, Hamilton, Princeton, Vassar, Wellesley, and Williams also require the candidate for admission to the arts course to have studied Latin in the secondary school. All of these colleges, however, except Williams, require either Latin or some Latin and Greek in the college, which is at least consistent. Amherst, Harvard, Oberlin, Smith, Trinity, and Wesleyan require either Latin or Greek for entrance to the arts course. Of this last group of colleges, Smith, Trinity, and Wesleyan require some classical work in college. Amherst requires it, unless the student has presented Latin, Greek, and a modern language. But neither Harvard nor Oberlin

make any demand in the case of either Latin or Greek, once the student has gained admission. One cannot but raise the question whether an entrance requirement of a specific study is justifiable under such circumstances.

In the western institutions the tendency has been entirely in the other direction. The University of California, which goes to the extreme view, specifically demands that the foreign languages required for admission shall be in modern tongues, and cannot be satisfied by offering Latin. The University of Minnesota goes to a still greater length, since it does not accept the ability to translate the Iliad as a proper test for admission to the College of Liberal Arts. A boy may offer to the University of Minnesota one year in Greek Grammar and one year in Xenophon, but more than this in Greek will not be accepted.

The preference which Latin has acquired over Greek is one of the anomalies of this development. Latin originally acquired its primacy in the educational curriculum, not from considerations of culture or of discipline, but from those of the most practical sort. If a man in the Middle Ages could not read Latin, he could not take up work in philosophy, or law, or science. But five hundred years have brought great changes. Neither in ordinary nor in learned intercourse is Latin needed. The literature of Greece is immeasurably superior to that of Rome. Yet in a large number of American colleges Latin is required and Greek would not be accepted as a substitute.

These facts disclose a difference in practice between the eastern and western sections of the country, and between our two types of higher institutions. In the eastern states, all of the well-known endowed institutions, with the exception of Cornell and Clark, require Latin for admission to the arts course. In the western part of the United States, such a requirement is practically unknown in the state universities, and is absent even in such strong privately endowed institutions as Beloit, Colorado, Grinnell, and Knox Colleges and Leland Stanford Junior University. This divergence imposes a curious strain on the secondary schools of the west which prepare boys both for western and eastern colleges. The situation calls for a thorough-going examination of the wisdom of these specific requirements, and an effort to make the entire system of entrance requirements more simple and more responsive to the needs they are designed to serve.

The first step toward such a solution is to recognize clearly what that need is. Only by some such process can the present anomaly of conditioning, on the average, two-fifths of the freshman class in our colleges be overcome,—an anomaly which is, in some ways, a far more direct criticism upon the college than it is upon the boys who are conditioned.

One who considers with a sympathetic eye the efforts of the western secondary schools to prepare for admissions varying upon such arbitrary grounds is filled with astonishment at the persistence of the variations still remaining amongst the examining colleges. There are at present only about a dozen colleges and universities which admit by examination only. This method of admission to college is now so completely

met by the examinations of the College Entrance Examination Board that one wonders at the maintenance of a separate system of examination by any of these institutions. The College Entrance Examination Board examinations are made up by committees of teachers from a large group of strong colleges and secondary schools. They represent the best point of view which can be had to-day in the preparation of such examination papers. They are generally admitted to be the fairest and most satisfactory examination papers that have been prepared. To compel a secondary school to prepare for separate examinations in elementary subjects like algebra and chemistry and Latin, for the sake of a particular college, would seem hardly justifiable at this day. It works an injustice alike upon the secondary school and the candidate for admission.

The classics are by no means the only subjects prescribed by the colleges for entrance. Specific requirements in the sciences, modern languages, and history are made by various institutions. For example, the University of Michigan requires physics. Yale limits the science which may be presented to either physics or chemistry. Outside of the sciences, the number of electives permitted by most colleges, particularly in the eastern part of the country, is small. Probably more than to the classics, the large number of conditioned freshmen in most eastern colleges is due to the fact that the high school course which these boys have taken cannot be made to dovetail with the prescriptions and negations of the entrance requirements of the college they desire to attend, in history and in the sciences.

The colleges, of course, have an answer to all this. They point out that Latin is better taught than French, and that physics is better taught than biology. This is true. Latin, with five hundred years of pedagogic method behind it, is generally a better school subject than a modern language, as it is taught in the American schools. Physics, the oldest of the sciences in the school curriculum, has been adapted to better pedagogic presentation than, for example, biology. The mistake comes in the wholesale action which the college takes to escape its difficulties. No one should expect a college to admit to its classes boys inadequately trained in German and botany, merely because they have studied these subjects in the high school for a given time. But the colleges have in their own hands ample means of discrimination between good teaching and bad teaching. They should exercise that discrimination, and not fall back upon the theory that one language or one science is *per se* better than another. Nothing would stimulate good teaching in the subjects still new in the high school more than such discrimination, vigorously and intelligently exercised. It opposes the practice now in vogue which tends to make all good teaching in a long list of subjects comparatively difficult, while mediocre teaching in the traditional subjects passes muster.

Indeed, the extreme minuteness with which American college requirements have been defined has been due partly to the chaotic condition of our American education, and partly to the distrust by colleges of one another. Simple tests to determine the fitness of the applicant were announced only by the poor colleges, dependent upon tuition

fees. Such institutions turn no one away, no matter how ill-prepared. If a strong college had set up such standards for entrance, its rivals would have considered it a device for increasing the enrolment, and the college itself would have distrusted its own situation. But fifteen units, defined down to the last hour of the school year and to every page of a text-book and every experiment in the laboratory, was a schedule which could defy the insinuations of rivals and the weaknesses of one's own virtue. The impossibility of living up to such requirements was met by the liberal admission of conditioned and special students. It requires courage in a college to adopt a sensible and simple method of examinations and to administer this in a common-sense way. The adoption of such examinations, however, forms the only practical escape from our present perplexities.

In spite of all the anomalies that still remain, however, the signs of betterment are not wanting. The colleges, like the banks, are realizing that they are not separate, unrelated units, but parts of a common system. This realization has progressed already very far among the strong institutions of the eastern states, where indeed it is astonishing that any competition beyond a generous emulation in intellectual achievement should ever have existed. Throughout the country, it is being realized that the prosperity of a good college increases, in a short time, the prosperity of all other good colleges. It is becoming increasingly easy for colleges and universities to coöperate in educational programs. The time is ripe for the introduction of a simple and adequate method of transition from the high school to the college.

No reasonable person desires to return to the vagueness of the past. On the other hand, it is equally clear that some healthier and more comprehensive method must be adopted than that of microscopic examinations which fix too closely the contents of the high school course, and take away, to a large extent, its scholarly significance. The action of our oldest university in undertaking examinations of a new sort is a step in educational leadership of the highest value, and one in which every college and every university must feel an interest. The outcome of this will depend, in a large measure, on the ability of those in charge to devise examinations which shall be fair tests of the student's intellectual achievement.

Under the new Harvard plan, the applicant must be examined in four subjects, one of which is either mathematics, physics, or chemistry. The striking thing about this is that the boy is not compelled to offer mathematics. In the important topic of English, the new Harvard plan of admission does not differ materially from the older plan. This is a question full of difficulty, and one that must be approached without dogmatism. It would appear, however, that any advance here must be along the line of greater simplicity. Two objects are attempted in the present examination in English. First, to ascertain whether the boy uses his mother tongue correctly and can write good, idiomatic English. Secondly, whether he has some acquaintance with English literature thru the reading of a specified number of books. It seems to me advisable for the college to sever these subjects even more widely, and to treat them separately.

The first subject is indispensable for the college matriculant, but might it not be better accomplished by treating a boy's entire examination as an examination in English, instead of creating a special one in that subject? There will, in general, be ample opportunity in the other examination papers to determine the accuracy and fluency of the candidate's English, with many advantages from gathering these impressions in this way, rather than from a paper set especially for that purpose. Such a test is more likely also to impress upon the boy's mind the fundamental fact that correctness in speech and power of expression should inhere in all that he does, and not be a separate faculty, to be exercised only in an English composition. The second object introduces an even more puzzling problem. Certainly it seems clear, from the results of our experience in the last ten years, that the dissection of delicate poems and stirring tragedies in class is not the method to communicate a love of good literature. The charging of the memory with the peculiarities of diction and thought of the writer is a fairly sure way to deaden the taste for good reading. It seems clear that the disciplinary training in the reading and writing of English is a matter to be kept separate from the pleasure which a youth should enjoy in the reading of a good book. An ordinarily intelligent reader who takes up Burke's great oration would be thrilled by it, but the school-boy who comes up for college entrance examinations must remember in connection with it a large number of obsolete details. As a result, he remembers little else. It seems better, on the whole, to seek to cultivate in the high school boy a taste for such literature as he can be led to read naturally, rather than to force upon him books beyond his understanding, or to seek to cultivate this taste by the method of literary anatomy.

Finally, I venture to refer again to one other matter with which I have already dealt, and that is the growing irritation of high school teachers against the college, arising out of the treatment of entrance requirements. The refusal of the college to recognize good work in many branches, now well taught, and in many schools where admirable work is done, is a source of constant irritation. The High School Teachers' Association of New York adopted, in 1910, resolutions favoring a reduction of the number of subjects prescribed for college entrance requirements, and the recognition, as electives, of others. The Boston Headmasters' Association called attention to the frequent inability of a boy who decides to go to college in the middle of his high school course to do so without undue delay. These indicate a certain irritation which should be met in a frank and sympathetic spirit, and which, in the long run, can be removed by an educational policy in the matter of admission which shall be generous and fair. And here again the road to improvement lies along the direction of greater simplicity and of cordial educational coöperation between college and secondary school.

ADMISSION TO ADVANCED STANDING

ON account of the varying standards of American colleges, and the differences in their organization, one of the most perplexing problems of administration arises out of the admission to advanced standing of students from other institutions. In a country so large as ours, with sections where commercial and economic interests are so varied, and where political problems are so complex, it is highly desirable that such migration of college students from West to East and from East to West, from South to North and from North to South, be encouraged, and that no unnecessary obstacles be offered to the migrating student. At the suggestion of several college officers, the Foundation, soon after the close of the last academic year, addressed a series of questions concerning their practice in this matter to about fifty institutions, in the hope that assistance might be derived from a general discussion of their procedure.

The replies indicate that the problem is one of importance, not only because of its difficulty, but on account of the number of students that are affected by it. In the institutions from which answers have been received, about seven per cent of the undergraduate body in 1911-12 came by transfer from other institutions of higher education. The normal schools supplied a considerable proportion of this transfer, particularly in the state universities: at the University of Michigan 28 per cent of the students received in 1911-12 by transfer came from these schools.

The first problem presented by application for admission to advanced standing usually concerns the rank of the college from which transfer is desired. Most colleges, when an application from a doubtful college is received, look up the records of students that have already been admitted from that college and are guided by their showing. This is seldom, however, a sufficient basis for a general practice, for the personal equation of one gifted or one backward student may make such records quite untrustworthy. A number of universities consult other institutions of good rank that have received students from a doubtful college. Others, like the Universities of Wisconsin, Minnesota, and Texas, and Indiana University, base their judgments upon the relation of the college to its state university or other recognized university of the same state or region. The University of Missouri refers to other members of the Association of American Universities. Vassar College writes that before credits are accepted from an institution, the curriculum and equipment are examined in detail by a committee of the faculty: as students from thirty-seven colleges scattered over the Union have been received at Vassar during the last five years, this method must involve almost prohibitive labor and expense. The University of Wisconsin, the University of Michigan, and Yale and Northwestern Universities make use of the "Classification of Colleges and Universities" prepared by the United States Bureau of Education; the University of Washington follows this in all cases. Harvard University makes no attempt to rate other colleges or universities. Each applicant for admission to advanced standing is judged in accordance with his own performances, and not in

accordance with the institution from which he comes. "Good men come from small places, and the best colleges have their failures."

The difficulty of estimating institutions is considerably increased when they are foreign universities, particularly when their location is in countries with which we are not intimately acquainted, such as Russia, the Balkan kingdoms, and the nations of the Far East. Our recent immigration and the tendency of the Oriental peoples to study Occidental methods are bringing considerable numbers of students from these foreign institutions to our own. The practice of judging a foreign university by the past performance of its students here is more justifiable than a similar practice in respect to American colleges. Administrative officers frequently correspond with one another concerning foreign applications, so that the knowledge or experience of one institution may assist another. The academic year-books afford some help.

The entrance requirements of other colleges are naturally an important element in deciding some questions of transfer. The University of Nebraska looks chiefly to these requirements, and gives equal credit for work done in colleges whose entrance requirements are equal to its own. The University of Michigan and Dartmouth College apparently do not accord any credit for the work done in a college where the requirements for admission are on a lower plane. Something, of course, is to be said in favor of rejecting applications for transfer from colleges whose standards of entrance are low. Yet a college is sometimes more than the grade of its studies; a great part of its influence is due to the intellectual atmosphere with which it surrounds its students, and it is not always safe to assume that this intellectual atmosphere is capable of fractional subtraction in the exact proportion that the college is a high school. It would be unfortunate if all institutions of high rank acted on the theory that low entrance requirements permanently affect the quality of all of the work of such a college, for then a student in a low-grade college would never be able to obtain admission to a better.

Most institutions, however, accept the work of a college of lower grade, but make allowances for the difference in the amount of preparatory work. This is the practice of the University of Wisconsin. Vassar College and Tulane University insist that the specific details of their own entrance requirements must have been met in the college itself, if not in its entrance requirements. This seems justifiable, for to enforce specific studies in the preparatory schools upon a college's own freshmen, and to admit that such studies are not necessary for upper classmen who have spent their freshman year elsewhere, appears somewhat inconsistent. Columbia University gives each candidate from an institution concerning whose standing there is any doubt, an informal examination by the accredited representatives of each department in which he applies for credit, and his rating is determined according to the recommendations of these representatives.

Even more difficult than assessing the relative value of study in a doubtful college is the decision concerning the quality of the various studies that have been pursued

by the students, whether in doubtful colleges or in institutions whose general excellence is unquestioned. This difficulty arises not only from the unevenness of the work in many good colleges, but from different systems of nomenclature and class organization in institutions all of whose work may justly be regarded as on the same high plane. Apparently most institutions leave this problem to be solved by the administrative organization which deals in general with applications for transfer, which may be either an administrative officer, such as the registrar, or a committee of the faculty. Such a committee, presided over by the dean, constitutes the method at the University of Wisconsin. A similar committee decides such questions at McGill University. Johns Hopkins and Lehigh Universities refer to the appropriate professors for a decision as to the rating on the quality of the applicant's previous work, and New York University and Smith College obtain such ratings from the heads of the departments concerned. The committee on admissions to advanced standing in the University of Pennsylvania confers with other members of the faculty touching the particular branches for which credit is asked, and work done in a poorly equipped department of an otherwise good institution is not credited. At the University of Chicago the university examiner is the official charged with the accrediting of advanced work; when he is in doubt concerning the value of any work presented, he refers the work in question for appraisal to the appropriate departmental examiner. Cornell University also has a carefully devised plan for estimating the studies presented for advanced standing. The blanks provided by the registrar's office seem to cover most contingencies, as they bring up for review not only the applicant's college work, but his previous preparatory school education. These are sent to those students who intimate a desire for transfer to Cornell, and, upon being returned, are forwarded, with the facts carefully collated upon another blank, to each professor whose classes correspond with those for which credit is asked. These professors, from their knowledge of the corresponding work in other colleges, note upon the blank the amount of credit to be given, and the registrar sends a summary of this, with the standing thereby conferred at Cornell. If the student is satisfied with his ratings, and desires to transfer, he then forwards the original papers concerned, and when the registrar's office finds that these agree with the statements upon which the professors have passed, the student is admitted. Such a combination of administrative action and professorial judgment seems admirably adapted to accomplish a fair result.

Indeed, on the difficult question of the proper handling of administrative work, the best solution seems to be a combination of faculty action with that of administrative officials, by which the faculty shall lay down the policy, and the administrative officer carry that policy out in its routine applications. It seems unnecessary to absorb the time of a distinguished scientist or a well-known historian in passing on credentials and interviewing prospective students; probably also the work will not be particularly well performed by them. On the other hand, to intrust a branch of administration entirely to the control of an official is to run the danger of that rigid-

ity from which a bureaucracy is seldom exempt. But if a committee of the faculty lays down the lines of policy as often as a general decision is necessary, and then the appropriate administrative official, who should advise the committee as its secretary, carries these general decisions out in practice, the administration is kept free and progressive, and the members of the faculty contribute their ability to the administrative work without allowing that work to demand too much of their time.

Upon certain practices in judging the work of other colleges there seems to be a general agreement; upon other practices much divergence of opinion is reported. The mere years spent in another college are seldom the basis for fixing the amount of credit to be given; almost all institutions disregard the year in which the student is enrolled, and estimate his credit course by course. There are some exceptions, however. Brown University accepts the work of leading institutions year by year; it is only for institutions of lower rank that the credit is made out hour by hour. The University of California gives credit in both ways, using each to check any inequalities that might arise from the exclusive use of the other. Thus, the work of a freshman in the University of California ordinarily amounts to 32 units. If a student comes from another institution after a full and normal year's work there, he is given sophomore standing by the University of California, being credited with 32 units, even if his work, when estimated by courses, would differ from this estimate by several units. If it differs considerably, the credit is estimated entirely by courses.

A unique instance of the difficulty in estimating the work of other institutions, either course by course or by any other method, is presented by the University of Virginia. At this university, until 1911-12, three courses a year constituted full work for the average student. In nearly all other colleges the student is supposed to take four or five courses. The work of a course at the University of Virginia was therefore more intensive than at other places, and it was almost impossible to give to a student coming from another college advanced standing that would be satisfactory. As a result, the university generally has had at any one time only two or three students who have been admitted with advanced standing, and sometimes it has been without a single such student for several sessions consecutively. The University of Virginia is now rearranging its policy so that the courses there will correspond more closely with those at other institutions; whatever may be said pedagogically in favor of its former system, the change will be beneficial at least in facilitating the migration of students from colleges to the advanced classes at the university.

There is less agreement as to whether credit should be given to work which does not correspond to work in the institutions receiving the application for advanced standing, or whether credit should be confined to parallel courses. The Universities of Nebraska and Minnesota, Purdue University, Indiana University, Tufts College, Dartmouth College, McGill University, and Vassar College, for instance, do not accept from another institution work which is outside of their own curricula. On the other hand, the Universities of California, Michigan, Kansas, Wisconsin, and Washington,

and Brown, New York, Leland Stanford Junior, Western Reserve, and Johns Hopkins Universities do not restrict credit to courses parallel with their own. Johns Hopkins University states emphatically that it recognizes any subject which is worthy of place in an independent curriculum. The University of Missouri likewise accepts all work done in an institution of high grade, but it declines to grant credit for courses which seem to be too ambitious for the institution attempting them. The curriculum of the School of Mines, Engineering, and Chemistry of Columbia University being entirely prescribed, credit can be given only for equivalent courses; in Columbia College, on the other hand, all "liberal" courses in which the work appears to have been well done receive credit.

On another point there is more unanimity. In nearly all cases, if a student has received a passing mark in the institution where he studied, that mark is accepted by the institution requested to recognize his work, even if the passing grade elsewhere is below its own passing grade. But this practice is not absolutely unanimous. At Northwestern University, in case work has been of very low grade but still above the passing mark, it is sometimes credited with Northwestern's credit for similar work performed in its own courses, which is that a certain percentage only is allowed to count toward graduation. The University of Wisconsin states that as it frequently refuses to credit for graduation low marks made within its own walls, it considers itself warranted in doing the same with students from other institutions. Columbia University follows with students from other colleges its practice with its own students of not according credit in any half year for more than one course in which a grade of "D" has been received.

Not only do the authorities have to decide upon the value to be assigned to college work of many kinds and grades, but applications for advanced standing are now fairly numerous from students who have spent some time in a professional or technical school and then desire to complete their academic education. They naturally seek to have their professional or technical studies counted toward the bachelor's degree. Still more numerous are the applicants who present normal school work for credit. Harvard, Yale, Tulane, McGill, and Indiana Universities, and the Universities of Minnesota and Texas do not accept such professional or technical work. Vassar, Dartmouth, Brown, and the Ohio State University credit such work only when it parallels work in their own courses. Lehigh University does not require that the professional or technical work shall be parallel to its own, but it requires that the work offered should have been acceptable for credit toward the degree of bachelor of arts in the institution where it was done. The University of Michigan will accept such work whether done in an arts course or in a professional or technical school, provided that it is of such a general nature that it might appropriately be included in its own department of literature, science, and the arts; similarly, Johns Hopkins University will accept such scientific work in a medical school as is usually given in college courses, and historical work in a law school, but not distinctively professional courses. The same

rule appears to govern the practice at the University of Pennsylvania. Ohio State University will, in the case of engineering students over twenty-one years of age, accept ability as a craftsman in lieu of half of the entrance requirements in foreign languages. The University of Chicago will give credit for professional work up to nine majors out of the thirty-six required for graduation; upon the nature of this professional work there are no restrictions.

Another group of institutions do not look at the academic nature of the professional work as a criterion, but seek to place the student from other institutions upon an equal plane of privilege with their own students, but no higher. Thus, New York University and Northwestern University will allow an applicant for advanced standing to count one year's professional work toward the bachelor's degree, as they allow their own men to do. Similarly, Cornell University will credit one year's work in law, altho, of course, in that case the option of spending the senior year in professional studies cannot be exercised. The University of California interprets a similar equivalence to mean that it would not be justified in accepting professional study if done earlier than the senior year of the college. Transfer under such conditions must arise rarely. The University of Illinois will allow students from other institutions the same "limited and specified" credit for work in colleges of engineering, agriculture, and law that it allows to its own students. The University of Nebraska credits such professional or technical work as may be applied to its own joint six-year courses looking toward two degrees. The University of Wisconsin has a similar principle: the professional work, like the work of the Wisconsin students, must have been performed during candidacy for the degree of bachelor of arts during the junior and senior years. The University of Missouri accepts only professional work done in a law or medical school with admission requirements equal to its own professional schools, and then only one year of such work. Columbia College will accept one year of technical or professional work, if it is of high quality.

In respect to normal schools the procedure is somewhat different. Tulane University allows a credit of fifteen hours for work in normal schools, when such schools are based upon a four-year high school course. Yale University gives credit only for work in normal schools which is exactly parallel to work of its own, and the University of Texas only such work as is ordinarily accepted for an arts degree. The University of Missouri credits as academic subjects the history of education and educational psychology, but not professional courses like school management and practice teaching. The University of Pennsylvania has the same general rule. Cornell University admits students who have completed two years in a normal school that has the full Cornell entrance requirements, so that graduation is usually possible from Cornell in three more years. Indiana University gives credit for professional work in education up to a maximum of twenty semester hours. Western Reserve University generally grants one year of credit for two years in a well-known normal school. The University of Michigan does not estimate the work of the normal school course by course,

but announces that a graduate from one of the stronger curricula in an approved normal school may be given such advanced standing as the nature of the curriculum he has completed justifies. Harvard University admits especially recommended graduates of high rank of the four-year course in the Bridgewater Normal School of Massachusetts, a combined college and professional course after a four-year high school course, to a credit of seven out of the necessary eighteen Harvard courses. With other normal schools Harvard has little experience. Northwestern University treats each applicant from a normal school individually, and if he comes from a school where college entrance requirements are enforced, and has completed the so-called two-year college course, he is generally given a year and a half or two years' credit, and can graduate with two years of somewhat heavy work. The University of Wisconsin, on the other hand, does not treat with normal school students from Wisconsin individually, but in general, in admitting them by an agreement between the university and the Wisconsin normal schools which was concluded in 1909. By this agreement graduates of the advanced courses of the schools are admitted with the rank of junior to the course leading toward the degree of bachelor of philosophy, which is designed especially for them. In the course leading to the degree of bachelor of arts, the normal school student is accorded junior standing if he completed successfully the equivalent of a standard course of a high school on the accredited list; if his elective work in the normal school has been of university grade, and if he took elementary foreign languages in the normal school, he must comply with the requirements governing university students who are admitted with no language requirements. Ordinarily this involves work equaling eight extra credits for graduation in addition to the regular 120 credits. The University of Minnesota allows one year of credit to graduates of five-year normal schools or to graduates of advanced graduate courses. The University of California gives, if it can be fitted into its regulations for its own internal government, a year and a half of credit to the graduates of the two-year courses in the California normal schools who are also graduates of approved four-year high school courses, and it endeavors to treat normal schools of similar standing in other states in the same manner. The general policy of the University of Chicago in accrediting the work of a normal school aims to be that of the state university of the state in which the normal school is located. The work to be accredited must be collegiate work and must not exceed nine majors a year, and be based upon a four-year high school course. If not so based, appropriate deduction of credit must be made. Courses in "Methods in Common and Secondary School Branches" can be counted only as pedagogical courses.

Occasionally, applicants for advanced standing are possessed of special maturity or experience, such as that of an experienced teacher, or of an experienced craftsman who desires to enter upon engineering. Harvard and Lehigh Universities, and the Universities of Wisconsin, Minnesota, Nebraska, and Chicago do not recognize this in granting admission, nor does McGill University, except to a very limited de-

gree in very exceptional cases. Columbia University does not recognize maturity or experience except in Teachers College, where such qualifications are sometimes proved by examination to be the substantial equivalent of professional courses. Dartmouth College and Vassar College do not give such qualifications any value toward advanced standing, but may be lenient in admitting such persons to the freshman class when all of the entrance requirements have not been fulfilled precisely. Similarly, Yale University gives the mature or experienced candidate a certain period of trial, even though he may be somewhat deficient in the absolute requirements, and New York University and the University of Pennsylvania recognize maturity or experience as constituting a certain waiver of technical entrance requirements. Johns Hopkins University does not find it practicable to recognize experience in teaching, altho it considers that some allowance perhaps might properly be made in the case of a skilled workman entering upon the study of engineering; Cornell University gives no recognition to experience in teaching, but by resolution of the university faculty, credit is given for experience in drawing and shopwork. The University of Missouri exercises its judgment in each case, being influenced largely by the student's first semester's work as a special student.

Indiana University makes specific provision for the recognition of experience in teaching, experienced teachers being able to receive five units of elective entrance credit therefor. Also the maximum credit of twenty semester hours allowed to normal school students for professional work in education is not granted to those students unless they have supplemented their school work by considerable successful experience as teachers. Northwestern University will admit particularly mature persons for one year as special students, and at the end of the year institute an equitable adjustment of credits, but the cases in which credit is given for such experience gained outside of a collegiate institution are not common, and the credit allowed is never large. Brown University, contrariwise, although not entering into specifications, writes that all possible credit for work which can be regarded as of a collegiate nature is made for unusually mature or experienced persons, and that sometimes such persons have had waived in their favor examinations and the requirement of exact parallelism of courses, especially in preparatory subjects. The University of Michigan has one specific privilege for persons of maturity and experience, altho the granting of this privilege is decided upon the merits of each case and is rare. Students of this character are sometimes allowed to attend the examinations in courses whose work they have covered outside of any collegiate institution, and if they pass the examination, they are given the same credit as those who have completed such courses successfully in the university.

In the variety of entrance requirements for college, and with the present tendency of many high schools to do some collegiate work, it frequently happens that students asking for advanced standing desire credit for work done in a secondary school in excess of the entrance requirements. The practice in this regard is not uniform. New York University and the University of Minnesota will not recognize such work.

Northwestern University limits the privilege to solid geometry, college algebra, trigonometry, and foreign languages other than high school Latin, provided that these courses have been taken in the last year of the high school; the University of Nebraska limits it to solid geometry, trigonometry, Greek, third year French or German, and fourth year Latin. Ohio State University, upon recommendation of the department concerned, will give about one-half credit for work in French, German, and Spanish in excess of the entrance requirements. Yale, Brown, Dartmouth, Vassar, Cornell, Lehigh, Purdue, Johns Hopkins, and the Universities of Missouri, Pennsylvania, and Washington will recognize it by allowing the student to pass the examination in the corresponding college course, and to receive the credit earned by that course. Harvard University allows this to a very limited extent. The University of California allows these examinations only in foreign languages, advanced mathematics, and drawing. The University of Wisconsin will not recognize such excess work when presented by students asking for advanced standing, even if the work has been accorded recognition by the college in which the student originally matriculated, and says that very little credit can be obtained even by freshmen coming directly from preparatory schools. Indiana University will allow credit for this excess of work if done in the high school in a definite post-graduate course, or if offered to offset any of the prescribed subjects in the entrance requirements. Leland Stanford Junior University will give credit for extra work if the work is continued in the university, and provided that the student maintains an average of "B" grade during his first two years of residence. In Columbia College a student, entering without conditions by means of the Columbia University examinations or the examinations of the College Entrance Examination Board, may receive credit for extra school work parallel to courses offered in the college, not to exceed two-thirds of the credit assigned to the given subject if taken in college, nor to exceed in the aggregate 18 out of 124 points required for the degree. The University of Chicago will accord provisional credit for fifth or sixth year work in a coöperating school whose work of those years is approved by the university, the claim to be tested later by succeeding work in the same department or by other means satisfactory to the departmental examiner. The University of Chicago will also give credit for advanced preparatory work done in a coöperating school in language, history, and mathematics, after suitable test. The faculty of the University of Michigan took action on this question in June, 1912, resolving that credit for excess secondary school work should be allowed only when the work was accomplished in a post-graduate high school course of at least one semester in length.

Institutions are pretty well agreed that a student receiving advanced standing for work in another institution must immediately make up not only any prescriptions for the freshman year in which he may be lacking, but must fulfil before graduation all of the requirements that are imposed upon those whose entire collegiate course is spent in the institution, except in some cases the requirement for a course in physical exercise in the freshman year. Where an institution prescribes a certain amount of

work in a major subject for graduation, the compliance with this regulation is often difficult for those who would otherwise be transferred into senior standing.

The University of Michigan allows to students admitted on advanced standing a wider election than is permitted to freshmen, although any choice outside of the limited list of freshman studies must receive the approval of the committee on elections. The University of Chicago requires the fulfilment of its language requirement in the Junior College, but the group requirements in years prior to the transfer are necessarily erased. The University of Minnesota waives all freshman requirements for students admitted to sophomore or higher standing. Cornell University appears to accord to a student admitted to a class above the freshman most of the privileges of that class, although its practice on this point may have been misunderstood. The University of Kansas accepts the fulfilment of all requirements for two years in an institution of equal rank as the fulfilment of two years of its own requirements, even if the requirements vary. In this matter McGill University is opposed to the general American custom. When a student is finally admitted to advanced standing at McGill, the years that he has spent at another college are considered completely equivalent, so far as technical regulations are concerned, to the same years at McGill, and he takes his place beside his fellow classmen in the advanced class as if he had been at McGill from his freshman matriculation and had fulfilled all of the detailed requirements of the university.

Yale University exacts the minimum loss of a year in all cases of transfer from any other college or university. This is done because the authorities of Yale "do not wish to encourage transfers from weaker institutions to the college by waiving our entrance requirements and giving full credit."

Every year most colleges dismiss a certain number of students, most of them for failure to keep up with their studies, a few for misconduct. What shall be the attitude toward such students if they apply for admission to other colleges? Harvard University, the University of Kansas, Dartmouth College, and Cornell University will not receive students dropped from other institutions. The University of California will give to students dropped from other institutions only the opportunity to pass the matriculation examinations and such examinations for advanced standing as are necessary for the status desired; it will not admit such students to advanced standing upon any record of work done elsewhere. The University of Minnesota will not receive a dismissed student without a special letter, recommending his admission to the university for "a good and sufficient reason." The University of Pennsylvania will not admit a student who has been dropped from a college unless it is "especially requested" by that college to do so. Indiana University, New York University, Tulane University, and the Universities of Missouri, Nebraska, and Michigan will receive such students only when they present certificates of honorable dismissal, which certificate the University of Michigan grants to no student who is forced to leave its department of literature, sciences, and the arts for either failure in studies or misconduct. Northwestern

University and the University of Wisconsin require a letter of recommendation from the dean or appropriate executive officer; at Vassar College this must be a "special letter of explanation and recommendation." The University of Illinois requires a letter of recommendation or indorsement. Yale University seldom admits students dropped from other institutions except upon a written statement of the president or dean that the dropped student deserves another chance and may do better in another college. Brown University receives no student who has been dropped from another institution without a letter of recommendation, or a statement from the president or dean that it has no objection to Brown's receiving the student. Brown University adds that there has been only one exception to this procedure in many years, in a case where, after careful investigation, it was decided that the objection of the other institution was clearly unreasonable. The University of Chicago admits a student dropped from another college for poor work only if the full statement of the facts by both the applicant and the institution previously attended justify the conclusion that acceptable work may be expected under the conditions prevailing at the university. Columbia College admits students dismissed from other colleges if they give evidence by a half-year's work in extension courses, or, in exceptional cases, in a summer session, of the intention to make a good record and of the ability to maintain it. Purdue University "scrutinizes with exceptional care" the applications of students who have been dropped at other institutions.

Johns Hopkins University writes that students dismissed from other institutions are received only after communicating with that institution and finding the reasons for the act of discipline, and obtaining the judgment of the dean or executive officer as to the desirability of giving the young man another chance. Johns Hopkins thus reserves to itself the discretion of passing upon the judgment of the officer whose opinion it solicits, and does not absolutely commit the shutting of its doors to any outside official or institution. Of course, rules must be made for the majority of cases, and not for the exceptions, but when one reads announcements that students will not be admitted if they have been disciplined at other institutions, or will be admitted only upon a letter of recommendation from authorities who have probably been engaged in controversy with the person on whom they are asked to sit in judgment, one instinctively remembers the splendid memorial in University College, Oxford, to that institution's reversal of its judgment concerning the poet Shelley.

Surveying the entire matter, it would appear that the time has quite come when it ought to be possible to attempt some adequate estimation of our American colleges, considering not only entrance requirements, but all elements of importance, in a way that will meet with general acceptance. It should not be necessary for a committee or an official to have to render a decision *de novo* every time an application arrives from a college with which they are not especially familiar, with the result that such applications are often hawked about by a shrewd student until he finds some college authority more unwary than the average.

Concerning the quality of work done in particular courses, it will probably be necessary for a long time to pass individual judgment upon each case, and the best way to do this appears to be to consult the best informed member of the faculty, the reference to him being prepared in advance by the registrar's office in such a way as to consume the least possible amount of his time. Much of the difficulty in this part of admission to advanced standing would be obviated if American universities and colleges would adopt common systems of nomenclature and a few other devices looking toward uniformity in matters that are essentially mechanical. No intelligent person wishes to standardize our higher education or to hamper the true individuality of any institution, but an individuality that consists chiefly of eccentric mechanical contrivances is not an individuality that aids the intellectual development of students. Some of the eccentricities that make it difficult to compare work in institutions of equal rank are traditional; some seem merely whimsical attempts to attain an air of distinction. The institutions that compose the Association of American Universities and the National Association of State Universities have done well to give a direction to our educational administration by discussing simple and uniform nomenclature and administrative measures, and it is to be hoped that this praiseworthy attitude will result in corresponding action.

In regard to the detailed matters upon which there is difference of practice, it seems difficult to pronounce an opinion, except that so far as possible the attempt should be made to recognize as equivalent an education obtained in an institution of similar ideals. On this principle, strict insistence upon parallelism of courses seems unnecessary, the passing mark of other good colleges should be accepted as final, and it should not be demanded of students admitted to the higher classes that the technical requirements of the freshman year be made up, provided that all requirements of the freshman year in the other college had been fulfilled. It is upon this principle that graduates of other colleges are admitted to graduate schools, and it is the only principle that places institutions of equal sincerity upon a reciprocal plane of dignity; otherwise, there is always the feeling that a college is trying to assert a petty superiority over its fellow colleges, a provincial idea that has been the source of serious evil in American education. An insistence upon parallelism and the exact making up of freshman work would result, if strictly insisted upon, in a student from Harvard College, or some other institution with a large elective system, finding transfer impossible to a smaller institution with a more rigid curriculum. It should, on the other hand, be recognized that a college that sincerely believes that a certain kind of training is indispensable to collegiate education is under no obligation, merely out of intercollegiate comity, to see its higher classes filled with students who have not received that training.

One of the greatest obstacles to perfect comity between American colleges is the practice of extending transfers into the senior year. This is true conspicuously under the circumstances in which senior standing is generally sought by a graduate of an

obscure college who wants, after one year's study, to be a bachelor of an institution that is widely known. Such a second bachelor's degree is desired chiefly for its commercial value in the profession of teaching, and seems to be unfair both to the public and to the schools engaging teachers. The apprehension that such transfers may be practiced to excess causes the introduction of many technicalities into the acceptance of work done in another college. Migration of students from institution to institution would probably be facilitated by requiring that at least two years must be spent in residence at the institution that grants the bachelor's degree, except in the cases of more mature men.

A student possessing professional or technical education, or education obtained in a normal school, should certainly be credited with that portion of such education which corresponds to college classes, as the so-called college course in the normal schools, the historical courses in a law school, and the underlying scientific courses in a medical school. Naturally, it should be insisted upon that the professional or normal schools in which such work was done should be good schools. Whether the strictly professional work should be credited is doubtful. Probably little harm would result from being liberal in this matter, because few students, except by accident, invert the order of their academic and professional education, and the latter training tends decidedly to develop logical powers of thought and mental concentration. As to maturity or experience, the only recognition that seems appropriate is to permit the applicant to prove, by passing examinations in college courses, that he has the knowledge imparted by these courses; maturity and experience should not ask for indulgence, they should be more than able to bear the full burdens imposed upon youth and inexperience.

Finally, colleges would do well not to enforce too rigidly their rules against the admission of students that have been dropped elsewhere. No good, of course, can result from allowing an incorrigibly indolent youth to drift about through successive colleges, and serious moral delinquencies should be punished more severely than by a mere transfer to another agreeable residence. But a boy will sometimes study in one atmosphere when he will not in another, and such a lesson as being dropped from college will often effect a serious change; above all, maturity should always be on its guard against too severe a judgment of the weaknesses of youth; folly and riot resulting from exuberance of spirits may make it undesirable to allow a youngster to continue in one academic residence, and yet not be righteously punished by exclusion from all opportunity for a higher education. Colleges should correspond cordially and frankly concerning these students, and great deference should be paid to the opinion of the college authorities best informed. Each institution must, in the last resort, decide for itself to whom its doors shall open or shut, and it should not bind its decision absolutely upon the willingness of some other college to issue certain certificates or recommendations. The committee on comity of the Ohio College Association seems to us to have erred when they recommend that no student refused honor-

able dismissal on the ground of misconduct be admitted to another college except with the approval of his former collegiate superiors. Altho they are very rare, incidents have been known where the judgment of college officials has been so distorted by the ingenuity of mischievous youth as to lose sight of justice and fairness.

In all consideration of admitting students to advanced standing it should be remembered that almost every institution exercises one efficient safeguard above all technical rules. The standing accorded to such a student is generally provisional until the end of a year. The student's own career therefore enables the authorities to correct any serious over-valuation of his previous training, and probably, in case of work of unusual excellence, even to revise any former ratings that may seem not to have done him justice.

In the confusion of educational standards it will require for years to come patience and good sense on the part of those in charge of admission of such students to leave the way open to the deserving student and at the same time not give encouragement to the ambitious and unscrupulous college. The difficulty would be less if the deserving student only came from the deserving college. As a matter of fact, the best student often comes from the most superficial and unworthy college, just as the most skilful physicians have in some cases made their start in the most shameless of the commercial medical schools. That a student is seeking to get out of a weak college into a stronger one is to his credit. In our present stage of development it is not always easy to deal generously with the individual student without affording material for the use of institutions that live by advertising. All of these conditions are improving, and in the transition period the determination may well be made to depend on the larger fundamental considerations rather than upon the narrower technical rules.

MEDICAL PROGRESS

THE Foundation has continued its work in medical education by the publication during the past summer of Mr. Flexner's carefully prepared study of medical education in England, Germany, and France. This forms an almost necessary supplement to the study of medical education in the United States and Canada, published two years earlier. The interest which has been displayed in this last bulletin, not only on this side of the water, but in England and in Germany, has been most gratifying. Following the suggestion of a number of those most actively interested in medical education and medical practice in Germany, an edition of the bulletin will be printed in German.

The comment on this publication from those directly concerned with American medical education has well illustrated the widely separated points of view which now hold among those dealing with this matter. By one critic the defects pointed out in foreign medical schools have been seized upon as a proof that American medical

teaching is quite abreast of, and even superior to, medical teaching in England and Germany. In another quarter the evident superiority of foreign schools in certain respects, as brought out in the report, has been resented as unpatriotic. These opinions represent, however, only the extremes. The great body of those interested in the matter have been glad to have a comparison of medical teaching on both sides of the Atlantic, written from the point of view of scientific medicine, and aiming to set forth the facts without partisanship. Medical patriotism which is willing to shut its eyes to actual conditions and glorify its own national weaknesses has no place to fill. There are no national boundaries in medicine.

As a matter of fact, admitting the weaknesses which still inhere in most American schools in professorial appointments, in clinical examinations, in hospital and clinical facilities, and in medical research, the report shows that in the eight or ten stronger American schools of medicine the student has, on the whole, as good an opportunity to learn the theory and practice of modern medicine as does the student of the European schools. This fact is most gratifying and encouraging. But the report brought out at the same time two other facts which cannot be lost sight of, and which are, on the whole, the most significant and important for Americans, whether laymen or practitioners, to apprehend.

The first is that, while European medical schools—for example, those of Germany—are practically comparable in faculties and standards, American schools range from the highest to the lowest conception of medical education and medical ideals. Side by side with schools of the best modern type, which are preparing men in a thorough way for the practice of medicine with a conscientious appreciation of the rights of the public, stand other schools whose function is to get the ill-trained and the unfit into medical practice by the shortest route which the varying laws of our states will permit. Boston offers to medical students at the same time the Harvard Medical School and the Boston College of Physicians and Surgeons; New York presents the medical schools of Columbia and Cornell and at the same time leaves open for the unwary the doors of the Eclectic Medical College; Baltimore presents to the medical student a choice between the Johns Hopkins Medical School and the Maryland Medical College; Chicago invites the candidate for medicine to choose between such institutions as the medical school of the University of Chicago and of the Northwestern University, on the one hand, and utterly unworthy agencies for medical training, like the Bennett Medical College, the Jenner Medical College, and the Herring Medical College, on the other; St. Louis presents the newly organized and endowed school of Washington University and the purely commercial enterprise known as the American (Barnes) Medical College. These are not frontier towns. They are our oldest and richest centres of civilization. Yet even in these the state of public opinion, and of legal enactment, and of medical ethics is such that the worst in medical education can flourish alongside the best. The state of California, which contains the medical schools of the state university and of Stanford University, also countenances a group of the

worst schools in the country, and recently chartered a "College of Medical Evangelists," where the "subjects of hygiene and sanitation are . . . studied from a biblical standpoint," and the degree of M.D. is given for a course which includes 900 hours of Bible, 540 of the practice of medicine, 250 in general evangelistic field work, and 240 in care of the sick. This situation forms the most striking contrast between medical conditions in America and in Europe. To remedy this condition, we need, first of all, the education of public opinion to the difference between medicine as a business and medicine as a profession. The public needs yet to learn that medical teaching cannot be had either on the plane of commercial effort or yet on that of ill-equipped devotion. It needs to learn that the maintenance of commercial and defective agencies for the training of physicians is a blow at public health and a betrayal of public interest; that society can obtain a full supply of men for the medical profession who are educated, well trained, and devoted to a high professional ideal. In proportion as the public realizes this it will come forward with the necessary financial support to maintain upon a sound basis all the medical schools that the country needs. By some such process must this anomaly of our civilization be dealt with.

A second striking fact brought out by this comparative study of medicine in Europe and America has to do with the matter of educational sincerity. In Europe no university would accept the responsibility of a medical school except with the same obligation of support and with the same educational ideals under which it conducts other departments of instruction. In America alone does one find a college or a university lending the shelter of its name and its charter to a medical school which it neither controls nor supports, and whose ideals of teaching are on an entirely different plane from those maintained in the other departments of its work.

Examples of this sort of relation are so widespread that instances will at once occur to any one familiar with the situation. Bowdoin College and the Maine College of Medicine at Portland; the Marquette University and the Milwaukee Medical College; the University of Southern California and the Los Angeles College of Physicians and Surgeons; Loyola University and the Bennett Medical College; Willamette University, Salem, Oregon, and its medical department; the University of Tennessee and its medical school at Memphis; Union University and the Albany Medical School; the Lincoln Memorial University and its medical school at Knoxville; the Texas Christian University and the Fort Worth School of Medicine; Cotner University and its medical school at Lincoln, Nebraska, are all instances of this sort of relationship.

These medical schools are not entirely comparable. Some of them, like the medical department of Cotner University, are hopelessly bad. Others have come to the better class of commercial medical schools. The Maine Medical School, for example, has shown marked improvement over its situation of two years ago, and a modest sum of money has been raised for its improvement. The University of Tennessee has during the past year for the first time obtained support for its medical school, and the use of this money has made a great improvement in the wretched enterprise which had

hitherto constituted its medical department. But all these colleges share in the maintenance of a relation under which they commend to the public medical schools whose academic standards belong to an entirely different order from that of the work which these colleges directly support and control. Bowdoin College, for example, and its medical department represent totally different educational ideals. When the college invites a student to study Latin, or physics, or literature at Brunswick, it undertakes to give him an education in these subjects quite comparable to that which he could get at Harvard or McGill. But it invites the medical candidate to accept an education which it knows to be utterly inferior to that which he could get at Boston or Montreal. Similarly, Union University and the Albany Medical School, the University of Tennessee and its Memphis department of medicine, belong to different educational worlds. To stand for a high ideal of education in one place and for a low one in another is an artificial and insincere educational program. Nowhere on the continent of Europe does a college or a university deal with medicine upon this commercial basis.

What are the reasons which impel colleges—sometimes old and well-known institutions—to maintain so singular a relation?

This question would not be a simple one to answer. Many factors enter into the situation,—institutional ambition, desire for power or for numbers, social influence—nearly every motive except an intelligent desire to serve the cause of medical education.

Some of these relations go back to a time when medicine was taught without laboratories. Bowdoin's medical college relation is an old one. An old connection is not always an easy one to drop. In addition, as Bowdoin is in a small town the medical school is generally looked upon by the friends of the college as forming a good foothold in Portland. The artificial relation existing between Union University and the Albany Medical School is also one which belongs to a previous epoch in medicine. Originally assumed in order to give the semblance of a university to Union College, it is kept alive at this day by a combination of social relations, institutional ambitions, and of medical politics too complex for an outsider to dissect. On the other hand, the University of Tennessee took over the Memphis School which now forms its medical department only two years ago, after a similar weakling which it had fostered at Nashville had died a lingering death. Just what considerations moved the trustees to take this action, outside of the widespread desire of state universities to keep hands on all lines of higher educational work, it is difficult to see. If the University of Tennessee has the money to develop a medical school, the evident place to develop it would be at Knoxville in connection with its own departments. The Memphis venture has the air of a political not an educational enterprise.

Whatever sympathy one finds it possible to exercise toward these medical teaching agencies must go to the men in the medical schools, not to the colleges. So far as the colleges are concerned, the relation is in nearly every case an insincere one. On the other hand, many of the teachers in the medical schools work with genuine de-

votion and oftentimes at great personal sacrifice. To comply with the law, teachers of the underlying sciences are obtained at pitiful salaries. Practitioners in many instances give their time and their means. Unfortunately, devotion is not always wise. To teach poorly a certain number of medical students who otherwise would get a better training elsewhere may call forth admirable devotion, but it is justifiable only when a definite and satisfactory status can be fairly seen in the future. Unfortunately, too, the same optimism which makes every college believe that the education which it gives is somehow superior to that given elsewhere finds a home in the humblest medical school. I have found teachers of medicine whose students lacked almost every facility of laboratory or hospital, who lived in the midst of confusion and neglect, and who nevertheless persuaded themselves that students were better off with them than in well-appointed, clean, and sanitary schools. Devotion is a wonderful thing. The world could not move without it. But one can well believe that in America, where devotion is so common, the ability to let alone the thing one cannot do well is a quality even more needed at the present moment.

These two things—the existence side by side of medical schools of the highest and the lowest type, and the anomalous relations between the universities and the medical schools—form the striking points of contrast between medical education in Europe and America as brought out by this report.

The unevenness of our situation has recently received striking proof in the city of New York. The newspapers have dealt with two events of widely different character. The medical department of Cornell University has been enabled by a generous benefaction to arrange an alliance with the New York Hospital, in virtue of which it will hereafter control one half the clinical facilities of this institution. Cornell thus becomes one of the medical schools which, at a comparatively small outlay, possess the equivalent of a university hospital. It remains to be seen whether, in making its appointments, it will cut loose from local traditions and honor men of ability and ideals regardless of where they are found; but in any case the proper relationship and opportunity have been secured. Simultaneously with this encouraging event, a faculty split, recalling the old proprietary days, was reported from the Fordham University Medical School. It appears that this school, by means of a faculty committee, had undertaken to institute certain improvements in order to remain in good standing with the Council on Education of the American Medical Association. These improvements were so obviously necessary that no reputable school should have required pressure from any outside source before making them. Nevertheless, as money was needed to carry them out, the school authorities did not feel themselves in a position to fulfil the faculty pledges. In consequence the most progressive members of the faculty withdrew in a body. At this point the characteristic difference between a genuine and a nominal university department appears. If a dozen professors withdrew from a university department, the entire country would have to be scoured to replace them; but when a dozen medical professors revolt from a proprietary medical school,

their places can all be filled next morning from the ranks of the local profession. And this is what Fordham University has done. One realizes sharply the unevenness of our medical teaching when he finds that the American Medical Association still feels it necessary to construe its list so liberally as to include in its Class A weak schools of medicine like those of the Albany Medical School, the Medical School of Maine, the University of Vermont Medical School, and the Medical School of the University of Buffalo. Undoubtedly the American Medical Association has done wisely in not going too fast. When one remembers how rapidly this reform has gone forward in six or seven years as the result of the intelligent work of this organization, he has no disposition to criticize the outcome. There is, however, always the danger in any attempt to separate educational institutions into artificially defined groups that the grouping will be assumed to represent more than it can possibly represent. When one realizes that Class A includes at the same time schools of medicine like those of Harvard, of Johns Hopkins, and of Western Reserve, and weak schools like those just mentioned as well as others equally weak, he realizes how short a distance we have traveled toward a uniformly high plane of medical training. This classification is in fact purely provisional. Without question it will be advanced as rapidly as the conditions will warrant. Some of the weak schools now included in Class A will be able to meet the rapidly rising requirements. Others will inevitably drop out. The college or the medical school which expects to remain permanently in this class may well face now the fact that within a few years Class A will include only true university schools of medicine with paid professors in clinical branches, full laboratory facilities, and right hospital relations.

Fortunately there is not lacking concrete evidence of substantial progress. The University of North Carolina, the University of Missouri, the University of Denver, the Central University of Kentucky, Chattanooga University, and, more recently, Washburn College at Topeka, Kansas, have frankly abandoned clinical schools which they felt were unnecessary and for whose support they could not hope to provide. The University of Illinois applied to the legislature for an adequate appropriation for its clinical school at Chicago, and when the effort finally failed the university promptly severed its connection with the Chicago school and arranged to confine its medical instruction to the two years which it could give successfully at Urbana. In various directions—the improvement of standards, better teaching, larger support, better hospital relations—the past few years have shown most encouraging progress in the United States and Canada.

Credit for this progress belongs in the first instance to the American Medical Association and its Council on Medical Education. The annual conferences of the council have been most interesting and fruitful. This is perhaps especially true of the last, to which Mr. Frederick G. Hallett, Secretary of the Conjoint Board of the Royal Colleges of Physicians and Surgeons, was invited from London. It has long been plain that the time was ripe for an improvement in the methods of conducting our state examina-

tions. In the past these examinations, wholly in writing, not only made it possible for poor schools to appear successful, but actually compelled good schools to adopt to some extent vicious teaching methods. The English examinations, largely practical in character, have the opposite tendency; and Mr. Hallett's clear exposition proved that such tests are both feasible and necessary in our own states. In addition to its educational conferences, the council by its inspections, at once judicious and thorough, has established a general consensus of opinion as to the standard which may fairly be required at this moment of an establishment that undertakes to teach medicine. Schools incapable of meeting such requirements are fast disappearing. The total of 166 schools of all kinds existing in the United States and Canada in June, 1904, has in eight years decreased to 117 in 1912. Homeopathic schools, of which there were twenty-two in 1900, have now fallen to ten; eclectic schools from ten to six; the physio-medical schools have entirely disappeared. The total student enrolment, which reached 28,142 in 1904, has now declined to 18,412. As the student bodies of the higher grade schools have steadily advanced in numbers, this considerable decrease has taken place precisely where in the public interest it should take place, namely, in the weaker schools. It is thus obvious that the destruction of one inefficient school does not merely result in increasing the enrolment of another: it actually and absolutely keeps a certain number of unfit men out of the profession.

The changes just mentioned are mainly negative in character; they indicate that there is less of what is bad or undesirable. Meanwhile, positive progress has also taken place. It was pointed out in the Fourth Bulletin of the Foundation that there could be no genuine educational standard as long as medical colleges that were professedly on a high school basis continued to admit students conditioned or on a so-called "equivalent." The Association of American Medical Colleges has now framed its rules so as to exclude from membership all schools adhering to these practices. Meanwhile, thirty medical schools require at least two years of college work for entrance and fifteen more require one. For the time being it is therefore important to make sure that standards are genuine rather than higher, and doubtless the association will look to this end. The internal improvements that have been made in the medical schools which survive are more remarkable and significant than the mere reduction in the number of medical colleges or medical students and graduates since 1904. The erection of new buildings, the construction of new laboratories, the installing of libraries and museums, the noteworthy extension of medical research, the employment of expert teachers, the improvement of the medical curriculum, the lengthening of the medical school year from twenty-six weeks in many schools to thirty-four or thirty-six weeks, the raising of entrance requirements and the greater strictness and intelligence in their enforcement, the improvement in the keeping of wards, the improved methods by which a check is kept on the medical student's work, the increased facilities for the student's individual work at the bedside, the closer relations between medical schools and hospitals—all these things constitute a marvelous

record of progress in the past seven years. The fact that all schools which aspire even to modest work now require a fair education for admission is perhaps the most significant fact of all. The experience of Europe proves that the requirement of a good education as a preliminary to the medical school exercises a larger influence for good than all other requirements combined. The simple demand that the physician shall be an educated man is the most important step toward a higher plane for the profession. American medical schools are committed to this step.

The question of adequate support for medical education becomes for the next decade a most far reaching and important one. Increased funds of varying amounts have been widely procured for laboratories, hospital extensions, and for the promotion of full time teaching and research. The Education Department of New York has taken advantage of this improvement to announce that in the near future it will cease to recognize schools employing less than six whole-time instructors. The department, furthermore, very wisely refuses to recognize nominal salaries as complying with its conditions. Naturally, in this general effort to procure money in order to escape further criticism waste inevitably occurs: many schools that would do better to emulate the example of those that have closed their doors struggle to imitate those that are destined to survive. Gifts and appropriations of \$5000 and similar sums for improvements are thus all too common. They enable weak establishments to maintain themselves a little longer. In no field of education to-day can wise giving do more than in medicine, but in no field does the intending giver need wiser discrimination.

I venture one word further concerning the work of the Foundation in this field of education. Its immediate connection with the subject dates from the publication of the Fourth Bulletin in June, 1910. In coöperation with the educational council of the American Medical Association and the Association of American Medical Colleges, both of which had for some years previously been effectively engaged in the work, it has sought to define the principles to which sound educational organization in medicine should conform at this time, and practically to assist in embodying these principles wherever opportunity offers. For the present these efforts are directed to the elimination of unnecessary schools, to the abrogation of all sectarian privileges, to the improvement of the student body as fast as local conditions permit, and to the replacement of proprietary establishments by adequately equipped and financed university departments, in whose conduct educational and scientific rather than professional motives are emphasized. In particular the Foundation has sought to assist positive and constructive effort by frank publications on medical education which aim to describe actual conditions, and to stimulate by a critical discussion the appreciation of things to be done and those to be avoided. The studies contained in the Sixth Bulletin, on medical education in Europe, fully sustain the position which the Foundation has previously taken, that medical education is primarily an educational, not a professional question; that in the fixing and administration of entrance requirements, the choice of teachers, — clinical as well as laboratory, — the arrange-

ment of the curriculum, in the relation of the hospital to the medical school, and in the conduct of examinations, the point of view of good teaching is of decisive importance.

It is the purpose of the Foundation to pursue its work steadily in the field of medical education. The value of such an agency lies in no small measure in its continuing ability. To follow such a study not for two or five or ten years, but for a generation, is to make a continuing contribution. It is this work which the Foundation hopes to do in medicine as well as in other educational fields which it enters.

I shall recommend to the trustees at an early date a study of dental education and dental training, and also a study of the training for pharmacy. There is at present much confusion as to these subjects, both of which are closely related to medicine, tho standing upon very different bases and demanding qualities of widely differing order. The matter of hospital relations is also one that urgently demands a fair statement of the existing facts before widespread improvement can be hoped for.

UNIVERSITY AND COLLEGE FINANCIAL REPORTING

THE inadequacy of the financial reporting of our universities and colleges has long been obvious to any student of education. When the Foundation asked in 1905 for data on which to base its pension estimates, a considerable number of institutions, in spite of their willingness and desire to coöperate, found it difficult to give even the simplest general information concerning their financial operations. The Second Annual Report in 1907, therefore, recommended a thorough altho simple public statement by every educational institution of its permanent resources and investments and its current receipts and expenditures, the whole checked and approved by chartered public accountants. The Third Annual Report in 1908 followed up this recommendation by indicating, on the one hand, the willingness of educational institutions to be open and helpful concerning their financial operations, and on the other hand, the extreme difficulty of reading and the entire impossibility of comparing their current financial reports. Three pages of simple forms for the exhibit of resources, income, and expenditure were then presented, and blanks containing these forms were made available for distribution to any institution that desired them. The same arguments were repeated in my report for 1909. The consequent response in correspondence and conferences caused the Foundation to have prepared and to publish as its Third Bulletin in 1910 a set of convenient Forms for Financial Reports of Colleges, Universities, and Technical Schools. This bulletin was the result of extensive inquiry concerning the current practices of our educational institutions in their financial accounting and reporting, a careful canvass of the information most desired by the friends, patrons, and students of higher education, and many conferences with financial officers of educational institutions, expert accountants, financiers, and educators

concerning the forms best adapted to meet these various ends. While providing for details found only in the largest institutions, these twenty pages of forms, or selections from them, are yet available for the smallest college. An introduction of a dozen pages explains the forms and summarizes the arguments for simple and systematic bookkeeping, accounting, and reporting.

This bulletin has been distributed widely. Its effect has been appreciable in encouraging institutions to publish at least some sort of financial report, and a beginning has been made in bringing about some measure of comparability if not of uniformity in those already published. So much more, however, remains to be done that I venture again to revert to the subject. It is seldom that so large an evil can be transformed into so great a good by so small an effort. Too many of our institutions still publish no financial reports at all, and it is to be feared that many of them have yet no adequate system of accounting.

It would seem needless to urge the absolute necessity of at least some form of financial reporting, — the example of the state universities and of our larger endowed institutions being so conspicuous and so convincing. Almost every educational institution needs both adequate accounting and adequate reports, however simple these may be. Sound educational policy can rest only upon sound financial foundations. Many an aberration that appears on the surface to be purely educational is due to an effort to preserve an appearance of prosperity while making efforts to ward off financial disaster. Competent accounting and public reports would quickly put an end to much educational false practice. Every institution that publishes a financial report helps to hasten the time when such publication will be one of the necessary duties of every sound institution.

The information that is desired from the financial reporting of educational institutions is merely a simple, honest, and intelligible display of the actual status and operation of the institution so far as these are in any way financial. The readers of such reports are in general trustees, alumni, friends and patrons, philanthropists who have made or who contemplate educational gifts, and individuals and agencies engaged in educational study. Simple and intelligible reporting is acceptable alike to the financier, the layman, and the student, and is equally desired by all. What all of these wish to know are the general totals of permanent resources with their increases or decreases, and the totals of current income and expenditure with their distribution and balances. For endowment it is desirable to know the totals, the general method of investment, and the amount of income available. The financial liabilities of an educational institution must also be shown, if its nature and functions are to be thoroughly understood. Whether these liabilities be in the form of annual or accumulated deficits, of annuities that must be paid, or of mortgages on real estate, they are all too frequently hidden or obscure. Concerning income it is desirable to know not only its amount, but also its sources as these represent endowment, student fees, and state or denominational support. Certain items of expense, moreover, are of fundamental importance.

The amounts and proportions of the income that are spent for administration, teaching, research, and upkeep, for libraries, laboratories, gymnasium, and chapel,—these items are highly significant for the present and future of the institution itself, and are most suggestive to other institutions and to educators and legislators. A grouping of all of these essential matters of income and expenditure as they represent the support and administration of an institution may be made in a few general summaries, with references to such other details as may be desired.

In response to these plain and simple demands on the part of the public, Harvard, Yale, and Princeton present complex financial reports,—of 173, 136, and 76 pages, respectively. In each, complexity and detail confuse and obscure the general information that is sought. If the eighteen octavo pages of the financial report of the University of Chicago are adequate, what justification can there be for the 194 quarto pages of the financial report of Northwestern University? Many bookkeeping details have, of course, no place in printed financial reports. No one is greatly illuminated by 94 pages of items like “washing towels \$14.60” in the financial report of the University of Toronto. The reports that have been mentioned are not only so minute that it is difficult to find the really significant items in them, but their terminology is extremely varied. Terms like repairs and equipment, furniture and fixtures, have different meanings to different persons and in different places in the same report. Some reports combine current and investment accounts in their receipts and expenditures. Disbursements are sometimes classified according to their object and sometimes according to the source of the money expended. The captions of various schedules often give similar names to different things and different names to the same things. Special funds are sometimes included and sometimes not included in general funds. Even the printing of such reports is often confusing because the same type is used for headings and sub-headings, and small items are given more conspicuous headings than large ones. In short, these financial reports, and they are representative, do not provide the simple and adequate information that is sought from them.

An absolutely uniform system of accounting among our institutions of higher education is unnecessary and probably impossible, but it should be possible to find out and to compare without difficulty the important items of their financial resources and activities. Comparative financial statistics, so valuable and suggestive for the educator, are still largely unavailable because of the great variability in financial reports. The United States Census Bureau and the Bureau of Education, the National Education Association and the National Association of School Accountants, are together endeavoring to urge uniform and simple accounting and reporting upon our school authorities. Such a study as has recently been made of the comparative cost of instruction and research in psychology in our leading institutions is valuable and suggestive to all who are interested in that and in related fields. It should, however, be possible to obtain such information from printed reports without being obliged to undertake a special inquiry in every case.

I venture, therefore, again to urge attention to this matter, and to commend the forms printed in Bulletin Number Three as being simple, clear, and as, above all, segregating the significant items. The experience of the Ohio State University in the use of these forms is interesting. In the words of its secretary: "The representative of the Ohio State Bureau of Inspection and Supervision of Public Offices was completing the annual examination of the Ohio State University when the bulletin was received, and he at once became interested in a study of the schedules as outlined in the report. The financial transactions for the year ending June 30, 1910, were then brought together, from existing records, to fill in the schedules as outlined, with the result which you now have before you. It was found desirable to modify some of the proposed schedules, and in order to show the number of instructors in each department and the salaries paid each grade, a new schedule (C, 5) was inserted. After the work for the year had been reduced to the schedules, the result was so satisfactory that it was decided to modify the system of accounting so as to provide readily the information required by the report." One of the features of this system at the Ohio State University is an admirable budget form, which presents for each item the expenditure for the past and current year, the recommendation of the department, the dean, and the president for the coming year, and finally the amount appropriated by the trustees. The University of Wisconsin, while continuing to issue its legal biennial report of receipts and expenditures, publishes also an educational report in the forms recommended by the Foundation, for the sake of simplicity and easy intelligibility and for purposes of comparison with the reports of other institutions using these forms. A general conference of financial officers of state universities at Chicago in January, 1912, expressed its special appreciation of these forms as both simple and adequate.

ADVERTISING AS A FACTOR IN EDUCATION

For two thousand years the Teutonic peoples have been characterized by their love of freedom. Noble as is this ideal, it has not always carried with it the recognition that the ideal of freedom necessarily involves the idea of limitation. Even in a democracy the individual must accept the limitation of law, of public duty, of personal responsibility, if he would enjoy his freedom. There has been in our country in recent years a growing disposition to insist upon the rights of freedom without its limitations and its obligations.

These conditions have been favorable to an increase in the number of those who make use of freedom to take advantage of others. Deception has been extraordinarily easy under the law and under the attitude of public opinion toward its enforcement, and of the various methods of deception, advertising has come to be one of the most common. It ranks to-day in this respect with adulteration and substitution. Numerous

agencies of manufacture, of commerce, of industry, of letters, of art, have successively become parties to unworthy methods of advertising. It is perhaps entirely to be expected that education and educational institutions existing under similar conditions should become, to a greater or less degree, involved in this practice.

Has advertising a function in education? If so, what is that function, and under what limitation may it rightly be exercised by a college or university? In the Annual Report of 1909 I devoted some pages to a discussion of this question. I venture to return to it at this time because observation of the matter in the interval seems to indicate that the objectional use of advertising in education has grown steadily.

To state in a few words what is the right function of advertising, so far as education is concerned, is not simple. This is evident when one considers the conception of the term as currently used, that is, the publication in the printed page, by the authorities of the university, of information with regard to it. Such a definition includes in advertising such publications as the annual catalogue, the circulars of information concerning work, announcements of the opening and closing of terms, statements of the equipment and facilities of the institution, reports of its financial condition, and all other publications pertaining to its work and to the opportunities that it offers to students. Such statements appear partly in publications issued by the institution, partly in magazines and newspapers, and at times, in articles prepared under the authority of the institution and furnished to newspapers.

It is clear enough that there is a legitimate use for the printed announcement of a university and of the work that the institution does. The difficulty comes in drawing a line between that which is wise and right and that which is unwise and misleading.

A few principles may, I think, be laid down which should govern a college or university in dealing with this matter, for no college in a democracy can separate its educational leadership from its moral leadership, whether it will or not. An institution exercises a moral as well as an intellectual power, and the conditions that determine the nature of its use of advertising are founded partly upon moral considerations and partly upon those of academic good taste.

The first of these considerations I believe to be the determination that printed matter concerning an institution of learning shall be given out only for the purpose of enabling a possible inquirer to find what he seeks, never with the idea of attracting students in the competitive sense.

Secondly: in stating the facilities which the institution offers, every effort should be made to be clear, brief, and accurate, so that the inquirer may really gain from the printed statement some conception of the actual situation described.

Finally: in announcing the facilities which the college offers, the claims put forward should be sincere, honest, and modest. Modesty is an old-fashioned virtue, but there is none which becomes a college better, or which ought more truly to characterize the academic spirit.

One who examines with care the publications of even our best and strongest institutions will realize that these elementary conditions are seldom fulfilled.

For example, the catalogues and other printed circulars issued by the stronger universities are, in many cases, so intricate and so technically worded that the general reader can learn little from them. There are very few catalogues which would not gain enormously in clearness and availability by the mere process of exclusion and condensation. When, for example, catalogues approach the two and one-half pound bulk of that of the University of Minnesota, they become almost impossible.

Much would be gained in clearness and in practical use for the student if the material were prepared from the standpoint of what the student and his parents wish to know, rather than from the standpoint of the professors of a department who desire to compare well with every other department and with every other college. The enormous mass of detail usually given serves to confuse rather than to aid either the parents, students, or others seeking information.

On the other hand, a brief yet adequate summary of the equipment and endowment, of the income and expenditures, such as has been recently included in their catalogues by the University of Virginia and the Catholic University of America, is most suggestive information for the parent and the student. Such statements usually appear only in the annual report of a university, if at all, and yet there is scarcely any other information which is more generally indicative of the real character of the institution. If the more pretentious colleges and universities which announce long assortments of courses should print side by side with these announcements the financial resources upon which they rely to carry out the work offered, few would be deceived by their exaggerated claims. Unfortunately, the parent or the boy who examines the high-sounding and attractive courses offered in the catalogues seldom inquires as to the actual means in hand for making good the promises. All colleges appear equally honest to him.

Perhaps there are few other places where the catalogues of all American and Canadian colleges are studied more systematically than in the office of the Foundation, and with the purpose of obtaining information as to the actual work offered. It is thru this experience that the Foundation speaks from the standpoint of one using the catalogues for the ends that they are supposed to serve. One cannot go thru this work without considering whether the primary purpose of many of these publications is to afford correct information. Certainly there are few catalogues that would not be the better if rewritten from this point of view. Whose need is the publication to serve? Once this is consciously recognized, clearness, brevity, and accuracy are apt to follow.

Perhaps there may be differences of opinion as to what is sincere and what is in good taste, and as to whether discussion of these questions of taste is profitable. I venture, however, to add at least the statement that there are obvious limitations to the use by universities and colleges of pictorial and colored circulars. The same remark may be fairly made with regard to the practice of printing the academic biographies

of professors,—a practice which has grown enormously with the ever increasing crop of doctors of philosophy. Such statements, if discriminating, have an undoubted value as throwing some light upon the character and experience of the teachers, but the models which have been used in the preparation of most of these biographies are not to be commended. Safer models can certainly be found in either the English "Who's Who," or the German "Wer Ist's."

An example of what ought to be shunned may be found in a recent circular of Reed College, at Portland, Oregon, which includes in its biographies of professors, editorships of college annuals, class votes on popularity, degrees that are expected, academic biographies of professors' wives, the number of their children, and, finally, portraits, which last are ever unsatisfactory intellectual documents. All of this savors of that form of professorial self-advertising which punishes itself by calling forth not admiration, but ridicule. This new and progressive institution might well have set a better example to its neighbors in the state, like McMinnville College, which advertises a "hand picked" faculty producing "a product second to none in America;" the unendowed Willamette University, only one-third of whose students are of collegiate grade; Pacific University, only one-fourth of whose students are of collegiate grade, in spite of a recent "student-getting campaign;" and the unendowed University of Puget Sound, only one-fifth of whose students are of collegiate grade, in spite of the fact that "Our faculty has been increased over 25 per cent and our courses of study extended at least 50 per cent."

A fair consideration of the tendencies now evident in our American colleges, and of the enormous number who are drawn into the colleges without preparation, will convince any candid inquirer that advertising has no legitimate use to-day in education in the United States beyond such straightforward, clear statements of the work offered as I have indicated. Advertising beyond that point is nearly always wrong, and in nearly every instance does harm. Any college advertising which aims to attract students to an institution or to a department because that institution or department desires more students, is almost sure to be harmful. College advertising, on the other hand, ought to endeavor to make such an honest display of the institution's qualifications as will aid the student in a wise choice of the department or the institution best suited to meet his needs. The unfair side of such advertising is clearly shown by the almost universal tendency to advertise the newest and weakest part of an institution. A fair statement of an institution's equipment, endowment, expenditure; the cost to the student; the number, training, and scholarly accomplishment of its staff; its requirements for admission and graduation,—these things are illuminating and helpful. Anything beyond this aims at institutional aggrandizement rather than student information.

Besides these direct methods of advertising, there are numerous others which are indirect, of which the most common have come to be the publicity bureau, the alumni organization, the honorary degree, and the free scholarship.

To deal with these agencies in full would require too great a space and go beyond the purpose of this statement, which has for its object not so much a complete account of the various methods of advertising as an endeavor to point out the spirit and tendency that are involved, and the necessity for the honest college to stand fairly toward it.

The publicity bureau may be helpful or harmful according to the spirit of its conduct. An honest, interesting, and clear account of work done in an institution can do only good, and the wider its circulation, the better. On the other hand, a publication which purports to be scholarly can be made as sensational as the most advanced yellow journal could desire. Discoveries may be hinted at which arouse public expectation. Ordinary routine work may be described so as to appear the latest scientific research. A mediocre book may be exploited as of extraordinary merit. The entire effect and value of such an agency depends upon the spirit in which it is conducted.

The attitude of alumni associations toward the institution with which they are connected may be characterized in the same way. Such associations may become most helpful and stimulating to the scholarly and moral life of the college, or they may be transformed, and unfortunately too often are transformed, into agencies for soliciting students and money. These last activities of alumni associations are so much a matter of course that a national meeting of college officers of administration recently discussed the topic, "The Most Successful Methods of Recruiting Students. How far may Alumni Coöperation be utilized?"

The conferring of honorary degrees may be justified upon many grounds, so long as these degrees are conferred with discrimination and justice, as they are in many of our institutions, but it would be difficult to understand the academic ground upon which some of the large and some of the small institutions confer these supposed honors. For example, how can a small institution like St. Stephen's College (New York) justify its conferring more honorary degrees than degrees in course?

The use of fellowships and scholarships as a bait to draw students is a story too long to tell in a single paragraph. It is known of all college men, but the public does not realize the extent to which this trade has gone, for in many institutions it has become little better than a means of competition with neighbors. While in most cases the older institutions have been more careful in this matter in their undergraduate departments, the distribution of fellowships in their graduate schools has generally gone on merrily. Without these bids, very many graduate schools would be entirely bereft of students. Every institution should state, in its financial report, the exact number of students to whom it gives free tuition, and in each case some sort of accounting should be made to the trustees of the institution as to the reasons for such action. It has been almost impossible to collect accurate statistics showing the extent to which this practice has grown, but any examination of the treasurer's report of most institutions will show a large discrepancy between the number of students enrolled and the receipts from tuition which naturally would result from such a body. No practice has done more to demoralize educational conditions than this competi-

tive use of free scholarships, or of those partially free. It is one of the forms of competition which has done most to bring students, who should have remained in their high schools, into the weaker colleges, and to weaken the intellectual tendencies of even the better colleges by the presence of more students than they can deal with wisely. The man who is seeking a good college for his son or his daughter should distrust the college which solicits his child's attendance, and most of all when the inducement takes the form of a bonus such as a free or partially free scholarship. If your son or daughter is to be well trained, some one must pay the cost. It is your duty to pay it if possible, and if you accept aid, it should be made clear that you are not doing this at the expense of some other boy. A scholarship supported by endowment and conferred on right grounds may be a good thing for your son (tho even here there are dangers), but a scholarship tendered by a college in order to get your son's attendance is of the same nature as a rebate at your grocery store,—it is an imposition on those who pay in full.

Those who have been most successful in the use of advertising methods in education are wont to reply to such criticism by pointing to their results. In the minds of most persons the bringing together of three thousand students—however immature and ill-taught—is an answer to all arguments. This is success. It is exactly the same success that the patent medicine advertiser achieves when thru advertising methods he educates a whole region to buy and drink his nostrum. When his constituency has grown to many thousands he has achieved success and the end justifies the means. The process by which some of our largest colleges have been built up is very like that.

The answer to the advocacy of the patent medicine process of advertising in education is not entirely simple; not only because the slow process of sincerity and good taste is less often appreciated, but also because in all educational upbuilding, faith is a necessary factor. If a college never took a step till the financial outcome were absolutely secure, our progress would be slow indeed. Faith and devotion have their place in college building no less than sincerity and honesty, and he would be a poor observer of human nature who would seek to belittle them. It still remains true, however, that in education there is every reason why faith and devotion should join hands with sincerity and honesty rather than with pretense and superficiality. After all, is not this question of growing less rapidly and more soundly the question which faces our democracy in all the fields of endeavor—industry, education, politics? We have thrown open our doors almost without discrimination, and in a generation the population has swarmed over and occupied a continent. Would it not have been better to have admitted fewer, to have remained more homogeneous, to have advanced in wealth and luxury a little more slowly, and to have known better what we were doing and where we were going? In educational building the same process has gone on. Is it a success educationally when, by such methods as have been employed, three thousand immature youths are gathered into one institution that calls itself a university? Does not this process foster just those national tendencies which the university

is meant to counteract, not to quicken? I do not think one can set out to answer these questions fairly without coming to the conclusion that the university and the college have lost intellectually and morally in proportion as they have given themselves up to the advertising spirit, and that in the process a false ideal has been set up as to what constitutes educational success. Whatever may have been true thirty years ago, it is clear that to-day we need not more colleges, but fewer colleges, not more students, but better prepared students, and that the opportunity both of the college and of the university to contribute to national progress lies not in bigness, but in greater simplicity, sincerity, and thoroughness; not in advertising, but in modest performance. Advertising in education is not so much a disease as a symptom.

In a word, competitive advertising clearly has no place in education. Independent advertising has its place only when it is informational and thoroughly honest. Co-operative advertising should not be too fine a thing to hope for. We may yet see a group of our best universities issue in coöperation a comparative statement of their offerings such as was issued formerly by the Association of Women Graduate Students. It would be gratifying if the Association of American Universities and the National Association of State Universities should unite their efforts toward some such end. The matter was aptly put by the principal of McGill University in an address on "Inter-University Arrangements for Post-Graduate and Research Students," at the recent Conference of British Universities in London:

"The way from competition to coöperation is long, but there is a growing conviction that competition in post-graduate work is at present unduly expensive, sacrifices the student, and hinders scholarship in order to further personal, institutional and regional emulation. When our graduate students have some accredited method of learning that if they want to study a certain subject they will find that subject best taught in a certain university, we shall be in a much better and more highly organized condition than at present. The problem is not free from difficulties, but it will be found as time goes on that increased coöperation shows the direction in which a solution ought to be sought."

While it may not be easy in the conditions which surround our educational institutions at this day to indicate with exactness what the limitations are which a conscientious and scholarly college should impose in its advertising, it is possible to point out some of the things which clearly ought not to be done, and in a democracy, the knowledge of what ought not to be done is the beginning of wisdom.

I venture, therefore, to refer to a few directions in which it seems clear that the advertising spirit has got the upper hand of the scholarly ideal.

It is a common practice, particularly among the smaller institutions, to advertise themselves as the equals of the best. Sweetbriar College (Virginia) is "of the grade of Vassar, Wellesley, Smith and Bryn Mawr." Scotia Seminary (North Carolina) is "the Mount Holyoke of the South." Elizabeth College (North Carolina) "ranks with the best colleges for women." Spring Hill College (Alabama) "ranks among the best edu-

cational institutions of the country." Oxford College (Ohio) is "equal in efficiency to any of the higher institutions of learning for women in the East." The Woman's College (Illinois) is "the best Woman's College in the West." At Valparaiso University (Indiana) "the course of study in the Medical Department is the same as that of the best medical schools."

An even more common practice is the reckless use of superlatives. Thus, the Ontario Ladies' College "offers the highest educational facilities;" Salem College (North Carolina) is "the best known school in the South;" Brenau College (Georgia) "offers the highest grade collegiate advantages;" Rockford College (Illinois) is of "first rank;" Shorter College (Georgia) is "of unsurpassed excellence." The University of Denver announces that "the best of everything is to be found here." McMinnville College produces "a product second to none in America." Such a competition in the irresponsible use of language defeats its own end. When one reads on the same page that Central College (Missouri) is "the Highest Grade College in the West for Girls and Young Women," and also that Lexington College in the same town has the "oldest, best and highest standard in the West," one merely turns elsewhere, even tho the latter institution adds that it has a "high-toned . . . noble faculty." Sad experience also teaches one to question the promise of the Fine Arts Institute of Omaha, "if you love the beautiful, we guarantee to teach you Art," and of the Combs Conservatory of Philadelphia, "you cannot fail to become an artistic player or singer if you come here."

The school advertising pages of our magazines are constantly enveloped in an iridescent spray of such adjectives. Each institution has a location that is either magnificent, glorious, unrivaled, or ideal; its equipment is thoroughly or completely modern, remarkable, excellent, or superb; its faculty is composed of experienced, cultured, superior, distinguished, leading, and inspiring teachers, who use "the best methods" with "a proved power to make scholars." The advantages and opportunities of each institution are unusual, exceptional, rare, unsurpassed, matchless, and preëminent, providing "education par excellence,"—"no other school in the country gives equal advantages." Each possesses either the finest college spirit with the highest ideals, or a delightful, dominant, romantic tone of culture. In short, every institution has every college activity. They are all unsurpassed, unique, preëminent, and ideal.

What is the effect of all this upon the reader? The well-informed man sighs and turns away. The earnest inquirer endures the economic waste of the cost of verification added to the cost of competition until his search is rewarded by an institution that offers "an honest education," a school that "does not claim superiority to every other school in the country," but "is simply a modern school with old-fashioned ideals," or a college "for students devoted to work." The merely credulous reader, however, and his name is legion, eagerly sends ill-prepared students to institutions that are educationally futile, or worse, and the intellectual end of these students is oftentimes full of bitterness. For so far as the student is concerned, such advertising

is almost wholly bad, and so long as people trust it, the weakest institutions can outshine the strongest, and the unworthy will continue to live by advertising.

It is simple fairness to the public that the nature of this sort of bidding should be brought into the light. This is the only reason for describing here the most ingeniously offensive piece of college advertising that it has been my fortune to meet. This is a series of weekly full-page notices of Muskingum College, Ohio, which appeared in the *United Presbyterian*, published at Pittsburgh, from October 12 to December 14, 1911, inclusive, as part of a "campaign" to collect \$250,000 for equipment and endowment. The first notice (October 12) devotes a poster picture and a dozen kinds of display type to "Muskingum College and the Ministry," urging that the denominational college is the primary source of an educated ministry. The second notice (October 19) presents "Muskingum College and Foreign Missions" in type an inch high, a map showing the route from the college to the uttermost parts of the earth, and nine rude portraits, including one of the Pope, representing natives of the lands to which graduates have gone as missionaries; the argument being that "the Church is Dependent upon the Denominational College for its Missionary Force." In the third notice (October 26) the same argument is extended to "Muskingum and Missions in the Home-Land," this time with two rude portraits of a boy and a girl missionary overlooking the subjects of their ministrations, who are scattered upon a route map of the United States. Notice four (November 2), "Muskingum's Contribution to the Educational World," displays nine half-tone portraits of graduates who became university, college, and seminary presidents and professors, including "the most beloved Bible teacher in America." On November 9 a wheel-like diagram indicates that "Muskingum College is at the Geographical Center of the Church." Below there appears a rude comic cartoon of an old shoe, filled and overflowing with riotous students, while a figure in academic costume chases others away with a bundle of sticks. This is interpreted in three stanzas of verse like the following, the scholarly qualities of which will be evident:

*"There is a college president, like the woman in the shoe,
Who has so many children that he does n't know what to do.
He tries to treat them fairly, and give them each some room
But the college grows so grandly, like a town site on the boom,
That unless her friends soon rally and provide another shoe
He must say to all new-comers: 'Get out of here! Skiddoo!'"*

The issue of the periodical for November 16 bears on the cover a view of nine buildings of the college, all yet to be constructed. The advertisement within illustrates the "Haul of Fame,"—donors bringing bricks by hand, hod, litter, wheelbarrow, wagon, train, and aeroplane, the explanation being that ten cents will provide for seven bricks, \$50,000 an entire building. November 23 presents another cartoon, a tug of war between the "Church at Large" for \$150,000 and the Alumni and the Synod of

Ohio for \$100,000. The contestants are expressing their enthusiasm by such remarks as "It looks good to us," and "Nine Rahs for the Church." The reader is invited to "Get in the stream of Muskingum's influence and make as big a splash as you can." The issues for December extended the period during which subscriptions would be received, promised college annuals to donors of \$15 or more, and pictured the content that would appear upon the faces of any who would offer annuity gifts or legacies, — "2 Great Opportunities for an Endless Life." It is astonishing that advertisements bearing such evident marks of insincerity and vulgarity should be admitted to the columns of a reputable religious journal.

Many of the institutions that indulge in such outbursts do not, of course, deserve the name university or college. Since the discussion of the unwarranted use of these names in the Annual Report of 1907 this situation has somewhat improved, but too many secondary schools still call themselves colleges, and too many so-called universities are still large secondary schools, with numerous appendages in the form of business departments, art departments, and the like, to catch the unwary. The United States Commissioner of Education in his report for 1911 transferred eighteen institutions calling themselves colleges to his list of secondary schools. His specialist in higher education published in the same year a preliminary classification of universities and colleges with reference to their bachelor's degrees as these prepared their holders for work in graduate schools, and estimated that only 59 institutions granted degrees that were entirely acceptable, and that only 161 others granted degrees that were approximately so. These 220 institutions comprise less than one-fourth of the institutions in the country that call themselves universities and colleges. The various regional and state associations of colleges and preparatory schools are performing a notable and difficult service in associating the honest institutions.

Besides the large group of careless and irresponsible advertising colleges, there remain those which are purely commercial. To these belong many of the correspondence schools and many of the proprietary professional schools of medicine and law. The advertisements of most of these institutions are absolutely misleading. They promise every advantage of university education, with no means to fulfil the promise. In many cases this correspondence has been so delusive as to bring them within the scrutiny of the federal postal authorities. Some of these institutions have been closed by the arrest and imprisonment of the offenders.

Some conception of the part played by careless and inaccurate and competitive advertising on the one hand, and by unworthy advertising on the other, will be gained from the statement which has been given. There are two phases of the question which I venture to commend to the consideration of the colleges themselves.

The first is the disappointment of the boy who has been deceived. It would astonish many to know how many men there are in the United States to-day who feel bitterly toward institutions which tempted them into their walls on reports which later have been discovered to be untruthful. This resentment will in future years

become stronger. The man who has been deceived into the idea that he was entering a college, when he was really becoming a student in a high school, will generally find it out, and in the long run this sort of deception will bring its own return.

Finally, the present situation in American education in this matter imposes special obligations upon the conscientious institutions. Just so long as the old and well-established college lends itself to a sensational and misleading exploitation of its own advantages, just so long as it departs from the fair standards of academic sincerity and good taste, it furnishes example and inspiration for the reckless and irresponsible college to go far beyond it, and it makes an excuse which the commercial vendor of professional education is only too eager to seize. There is here for the honest college a duty to the public which touches its moral leadership very closely. It is part of such leadership to make clear to individual citizens the limitations which go with freedom no less than the privileges and the rights of freedom. It does this in the only effective way when it conducts its own business not only within the law, but also within the limits of academic sincerity, honesty, and good taste.

EDUCATION AND POLITICS

In the American nation the educational unit, like the political unit, is the state. Not only has each state government developed an educational system of its own, but the independent and the denominational colleges also have grown in accordance with state boundaries. Whatever political considerations, therefore, enter into the control and management of institutions of learning arise out of the political influences which are developed in the state itself. They are the result of state politics, not of national politics, except in those regularly recurring cases in which the states endeavor to better their educational systems at the expense of the national treasury.

The effort to free the state institutions of learning from party politics has been a long struggle. In the earlier days of the state universities, not only were these institutions the prey of political parties, but in some states religious denominations sought to control them. Happily that day has now passed. No political party and no sectarian body, as such, is undertaking to-day to control the state institutions of higher learning. The politics which still encumbers these institutions is not party politics, but personal politics. Such political influences as remain arise out of the desires of trustees to get places, to repay political debts; out of the ambitions of men and of institutions; out of the rivalries of competing colleges. The question is no longer how to keep out the control of Democrats or of Republicans, but how to prevent men who are in one or another party from using the state institution of learning for personal ends. Human nature in endowed institutions is in no sense different from human nature in the tax-supported colleges and universities. In them individuals and groups of individuals also play at politics. Their rivalries have brought in many cases similar unnecessary cost

to the public. Within a recent period privately endowed institutions are obtaining appropriations from state governments without assuming the supervision and control which ordinarily goes with state aid.

The politics which enters into higher educational management therefore usually appears under one of the three following forms: (1) thru the appointment of a board of trustees lacking knowledge of educational needs and ready to gratify personal ambitions at the expense of the institution; (2) by the efforts of rival state establishments or their presidents to exalt their own institutions and to cover every field of instruction; (3) thru the efforts of endowed institutions to obtain state appropriations without accepting state scrutiny or state control. These three forms under which personal politics enters deserve thoughtful consideration at the hands of those who have to do both with education and with legislation.

THE POLITICAL BOARD OF TRUSTEES

The selection of boards of trustees or of regents, whether for endowed institutions or tax-supported institutions, remains to-day one of the weakest points of our university organization. In endowed institutions such boards are likely to become dummy boards. Prominent business men are often selected for these positions because of the hope that they may give money. Ordinarily, when the business man has subscribed a certain amount, he considers that he has discharged his duty. Generally he has little qualification for the duties of a trustee, and has already in business grown accustomed to dummy trusteeship. Such a board of trustees usually intrusts the actual management and responsibility to one member, generally the president. Under such a régime an institution may obtain a paternalistic and benevolent form of government, but not one which lends itself to the conception of a true university. The boards of regents of state institutions are usually restricted in number, so that the responsibilities of trustees are not so diluted. Such boards have been inclined to go to the opposite extreme and to consider themselves not only governors, but executives of the university, usurping the duties of president and faculty. Only a limited number of institutions, whether endowed or tax-supported, have succeeded in securing a small effective body of men who are acquainted with education and are willing to give thought and time to the problems of the university, and are content to remain meanwhile the advisers and helpers of the president and of the faculty, realizing that their function is to govern, not to administer.

In the state institutions the boards of trustees or regents are sometimes elected by the people of the whole state, but more generally are appointed by the governor, either with or without confirmation by the state senate. The political difficulties of most state institutions have come thru the personal politics of the members of the board of regents so appointed, and they arise not out of the effort to serve this party or that, but to further personal interests.

The matter is well illustrated in the action of the board of trustees of the State University of Kentucky some years ago in the choosing of a president, to which reference has already been made in these reports. Kentucky was in just that position where an educational leader at the head of its state university would have been of untold service to the whole commonwealth. The board of trustees had the opportunity to serve the state in a most far-reaching way by the choice of such a man, and announced their intention to follow such a policy. A committee of the board was appointed to find a president. The leading member of this committee was a prominent democrat, without educational training or experience, and the committee recommended, and the board subsequently accepted him as the president of the university with the help of the republican governor of the state (a Harvard graduate). No party purposes were served by this transaction. The politics which entered was of the personal form.

The troublous history of the State University of Oklahoma, arising out of the workings of a political board, has been referred to in previous reports. The overturning of the university and the dismissal of President Boyd as the result of action by a board of trustees moved by local and political considerations was fully described. Since that time its history has advanced rapidly, and the state university was provided with an entirely new board of trustees, which also had in charge all of the public institutions of the state. This board promptly dismissed the president so recently appointed and a number of professors, and appointed a number of new men. The institution was for a time under an acting president, but has been fortunate enough to secure in President Brooks, who accepted the presidency last spring, a man of admirable training and experience, who, if he is allowed to administer his office without interference, will undoubtedly serve the institution and the state well. Since President Brooks's acceptance, however, his board of trustees has been changed by the abrupt dismissal of three of its members by the governor of the state. A remarkable situation has resulted from this action. The governor called the senate in special session to confirm his new appointees to the board. The senate refused. As a result the governor has appointed a temporary board to act in necessary matters until the convening of the legislature in January, 1913. The governor issued a carefully prepared statement setting forth his reasons for this action. In this statement he charges that the proof placed before him compels him to believe that the three trustees dismissed had used their offices as trustees for their own political advantage, that they had dismissed competent faculty members in order to appoint personal favorites, and that there was grave reason to believe that they had entered into dishonest arrangements with the American Book Company for a contract for supplying school-books to the state for a period of five years. It may not be known generally to what extent the scandal of contracts for school text-books has gone in certain sections. In some states the school-book lobby is looked upon as one of the most objectionable legislative influences of corruption. Governor Cruse's action in removing these trustees and his straightforward and com-

plete statement of the reasons for it deserve the approval of the public of his state. His paper is an educational document of high value for the light it throws upon the political conditions which may sometimes obtain in such boards. The people of the state of Oklahoma sincerely desire that their institutions may be conducted upon good lines. Their administration of state government has been under circumstances of the highest difficulty. The population of the state grew in a few years from sparse and widely scattered settlements to a million and a half people; when the first state elections were held, the great body of citizens had no means of knowing the political sincerity and ability of the men who offered themselves for office; the opportunity for the political demagogue was unusual. With the experience now gained, it may well be hoped that a public sentiment will develop which will insist that trustees of the state institutions shall be men of such intelligence and character that they give themselves sincerely and honestly to their duties, and be concerned in no secondary benefits of a political sort. The present régime, under which one board of trustees undertakes to govern all the educational and eleemosynary institutions of the state, has clearly proven its impossibility.

Personal politics among trustees is not confined to tax-supported institutions. In view of the rapid entrance of women into political life, it is interesting to note that the president of Wells College, a man of high standing and fine service, was recently forced to resign by the action of a group of the women trustees of the college whose methods resembled those of the political caucus. As a protest against these methods, five of the eighteen trustees of Wells College resigned. Caucus methods for getting rid of a president who may be out of favor with any particular group of trustees or alumni in no wise differ in endowed institutions from similar methods in tax-supported institutions. The way to bring about a change of presidents, if such change is necessary or desirable, lies in an absolutely open method of dealing with the situation by the whole board of trustees.

INSTITUTIONAL RIVALRY AND PERSONAL AMBITION

Next to the politics which enters thru politically appointed trustees, the most common source of educational politics lies in the division and consequent rivalry of state institutions. Perhaps no one situation has offered so great a field for state politics in education as that which arises out of the struggles of a state university, a state agricultural college, and a state teachers' college, each of which aspires to cover the whole field of education. Such a situation furnishes exceptional opportunities for legislative log-rolling by reason of the local self-interest which is aroused. One part of the state is played against another part, and each secures appropriations at the expense of a sound educational policy. Furthermore, such a situation affords the widest scope to the personal ambition of those who may head such competing institutions. On the whole, it may be said fairly that politics of the objectionable sort

has had a larger play in education by reason of such rivalries than by any other cause outside of the politically appointed board of regents. So keenly has this situation been felt, that in states like Iowa, Oklahoma, and Florida efforts have been made to get rid of the rivalry and log-rolling in the legislature by concentrating the administration of all state institutions of higher learning in a single board.

The most hopeful effort of this sort is the Educational Commission of the state of Iowa, which was fully described in my report of 1909, and which now has had three years of history. This board has sought to deal sincerely with the difficult problems with which it has been concerned, and it has recently taken very decided action in the endeavor to coordinate the three state agencies of higher learning with which it was appointed to deal,—the state university, the state college of agriculture and mechanic arts, and the state normal school. It has limited the function of the state normal school, which was developing into an arts college, into a training school for elementary teachers. It has transferred the school of home economics at the agricultural college to the state university, and it has solved the question of competing schools of engineering by abolishing the school of engineering at the university and retaining that at the agricultural and mechanical college. These recommendations, on the whole, are in the direction of a coordination of state educational institutions, and if worked out patiently and fairly, should lead to a wiser use of public money in education and to the avoidance of harmful rivalry. No one familiar with educational demands can doubt that it is the business of the normal school to devote itself heartily and unreservedly to the training of teachers, rather than to develop a college of arts, of which in the state of Iowa there is a plethora. The decision in the matter of the engineering school does not rest upon such secure educational ground. One school of engineering, supported by the state, is all that can be justified, but the place of such a school would seem to be clearly in the university and not in the school of agriculture, and this is no less in the interest of agricultural teaching than in the interest of engineering. In this instance the board seems to have adopted the measure which was politically easier rather than the one which was educationally sounder.

Efforts in other states to curb the tendencies of competing state institutions by the device of a single board have not borne out the hopes of those who undertook the reform. This result is due in the main to two causes. First of all, the administrative machinery under which a single board undertakes to deal with institutions of widely varying scope is an almost impossible one. Trustees can rarely be found to give time and thought to a single institution. When there is committed to them a group of institutions, either the fortunes of each institution are turned over to a single member, or else the board is likely to develop into a body dealing with a series of unrelated and diverse details. Secondly, in most cases such boards have been made up upon political rather than educational grounds.

The outcome of one of these efforts, that in the state of Montana, resulting in the

past summer in the summary dismissal of the president of the university, illustrates so strikingly the weaknesses inherent in such an organization that a brief statement of the circumstances cannot fail to be of value in the experience of other states.

In the state of Montana there is a constitutional state board of education, made up of three *ex-officio* members, — the governor, the attorney-general, and the state superintendent of public instruction, — together with eight other members appointed by the governor not subject to confirmation by the state senate. These last-named eight members serve for fixed terms. In addition there is another board, the state board of examiners, composed of the governor, the attorney-general, and the secretary of state, which has the power of financial supervision and of financial scrutiny over all the state institutions, including those of education. The institutions which come immediately under the state board of education are the state university, the agricultural college, the school of mines, the normal school, the reform school, the orphans' home, and the school for defectives. At the same time, however, the state board of examiners has complete control of these institutions in financial matters. Supplementing these two state boards, each of the institutions just named has an executive board, composed of the president of the institution and two members appointed by the governor. Each executive board has strictly subordinate powers, conferred and defined by the state board of education in educational matters and by the state board of examiners in financial matters.

The complex relations which a president of an educational institution in Montana has under this régime are evident at a glance. This complexity is heightened by the fact that the governor is expected to appoint one representative of each educational town on the state board of education. Naturally, therefore, in the past the interests of each institution have been cared for by the member from its town. Each town representative thus became a controlling factor in the board in the affairs of its own institution, and by a system of courtesies common in such legislative business, the local members could generally count upon reciprocity of support.

The arrangement also makes quite clear the fact that the governor and the attorney-general, under such a situation, can in large measure control the affairs of all these institutions, if they care to take such action. In fact, these two officials, composing as they do a majority of the state board of examiners and having control of every matter involving money, are the chief factors in the educational situation. When they come to sit with the representatives of each town or institution, the opportunities, at least, for typical political exchanges of favors are obvious.

The board so constituted abruptly dismissed last June the president of the state university. It does not seem wise or desirable to go into an examination of the details of this action or of its justice or injustice. On the other hand, the dismissal of a university president in Montana is a matter which affects every other university, and the conditions which make possible so unfortunate an episode are fruitful subjects for their study. Assuming that all those concerned in the transaction acted from the best

motives, two lessons from the experience of Montana seem evident, as to the methods of administration which ought to hold in university management.

In the first place, it is clear that the division of the state university into unrelated sections and the appointment of a board chosen partly on political and local grounds affords the opportunity at least for a large play of sectional and personal motives. Such a board of trustees dealing with institutions of diverse types is clearly impossible from the standpoint of effective institutional administration. The one board plan was adopted to meet the exigencies of a divided institution. The result in Montana goes far to show that such a device cannot cure the original mistake made in establishing competing state institutions. A small responsible board, chosen on the ground of fitness and willingness to give time and study to the problems of the institution, constitutes the best agency as yet devised for governing a state university.

Secondly, whatever may have been the grounds for a sudden dismissal of the president, the method by which it was carried out was one calculated to discredit both the board and the state. To hold inquiries in the president's absence and to dismiss him by mail after an executive session is not the way to effect a change of administration. The university is assumed to represent a high form of just and open dealing. If the president has to go, there is a dignified, open, and straightforward way to conduct such a matter. To deal with it in any other way is to strike a blow at the university itself, and at the ideals for which a university ought to stand.

The experiences of Montana, Kentucky, Oklahoma, and other states ought to carry their own lessons to those who are seeking to govern our state universities upon right lines. To-day the problem of an efficient, fair-minded, and devoted board of trustees for our state institutions is one of the most vital questions in their government. It is of great importance that public attention should be turned to this question. The ability to furnish such a board for a state university is a high test of the civilization of any American commonwealth.

TRANSFORMING NORMAL SCHOOLS INTO COLLEGES

How great a part personal and institutional ambition has played in the development of educational politics it would be difficult to say, but the results of it can be seen in every state where the divided institution exists. These appear usually in two forms: first, the endeavor of each institution to cover the whole field of education and the consequent duplications which ensue; secondly, the widespread tendency to drop the legitimate work for which the institution was founded in order to take up some other work which appeals to the ambitions of its president, or of its board of trustees, or of its faculty or alumni.

Examples of the first sort have just been alluded to. Other examples in the educational history of Iowa, Colorado, Michigan, and various other states will readily occur to the reader.

Where three or four state institutions exist, this rivalry has inevitably led to much commerce with the legislature, to overlapping institutions, and in nearly all cases to a strenuous struggle for students. The three-cornered rivalry between the university, the agricultural and mechanical college, and the normal school in the states like Iowa and Kansas are typical instances of the results of such a régime.

A singular outcome of this situation in recent years has been the effort of the normal school in many states to transform itself into an arts college. The normal school is at best a singular institution, seldom related logically to the educational system of its state. Its weakness from the educational point of view lies in the fact that it undertakes to make a teacher of a man or woman whose education is so limited as to afford slender basis for a teacher's training. From the time of Horace Mann, however, it has been the agency upon which our states have come more and more to depend for the training of teachers for the elementary schools, and particularly for the rural elementary schools, since the larger cities have in many cases provided agencies to train teachers for their own schools. Notwithstanding its educational isolation, some such agency as the normal school seems necessary at the present stage of our educational organization, and probably will be necessary for many years to come. When one considers that in many of the middle western states not more than ten per cent of all the public school teachers have had the equivalent of a high school education, one realizes that in order to obtain the necessary teachers for the common schools of the country, some agency must for a long time prepare a large number as best it may. One may well hope that the low standards of training for rural teachers now in use in many states may be raised, and that the necessary number of teachers may be forthcoming at a continually higher level, and that school teachers may soon be themselves fairly educated men and women. In any case the function of the normal school in our present situation is definite, clear, and of immense importance. It is therefore little less than astounding to find normal schools in so many states ready to turn aside from this definite and important work, in the effort to transform themselves into weak colleges, and this, too, in states where the number of such colleges is already larger than the ability of the population to sustain. This movement has arisen in some cases out of the ambitions of the heads of these institutions and of their faculties, who somehow have the mistaken feeling that the work of the college is more honorable and more desirable. In some cases it has been undertaken with the honest belief that the two institutions, college and normal school, would grow side by side, a result which would be against all our educational experience; but from whatever motive undertaken, it has inevitably involved these schools in politics.

An illustration of such legislation is found in the measure passed by the last session of the Wisconsin legislature to the following effect: "The Board of Normal School regents may extend the course of instruction in any normal school so that any course, the admission to which is based upon graduation from an accredited high school or its equivalent, may include the substantial equivalent of the instruction given in the

first two years of a college course. Such course of instruction shall not be extended further than the substantial equivalent of the instruction given in such college course without the consent of the legislature."

This language is capable of at least two interpretations. It might mean the extension of the normal school course for two years along normal school and pedagogical lines equivalent in intellectual demand to the corresponding years in college, thereby training a better teacher, or it might mean the superimposing on the normal school of two years of ordinary college work. Apparently both of these ideas were in the minds of those interested in the legislation. As a matter of fact, however, the normal schools have immediately translated this legislation into the authority for establishing the first two years of an arts college.

It requires no prophet to see whither this movement leads. Under the arrangement college students and normal school students are in the same classes. It will not be long before there is an attempt to so extend the curriculum that the equivalent of four college years will be given. Already the normal schools are introducing technical studies and asking for credit for the first half of curricula in agriculture and engineering. There are in Wisconsin eight state normal schools, and more are in prospect. This movement means the transformation of these schools from institutions primarily designed for the training of teachers to colleges having the ordinary college atmosphere with all the distractions which differentiate the American college from the professional school. It may be wise for these professional schools to be transformed into colleges, but if this is to be done, it should come only after a fair and full discussion of the whole matter from the educational point of view. There are those who contend that the atmosphere and spirit of the present day college can be successfully grafted upon the professional school. Perhaps this is true, altho the evidence would seem to be against it. The result of such a mixture is likely to be an institution lacking the best qualities of both. But in any case, such legislation should not be enacted until those responsible for it have had a full discussion of the whole matter by men familiar with educational problems and who are not directly interested in the problems either of the Wisconsin normal schools or the Wisconsin endowed colleges. Wisconsin has in many respects led the way among American commonwealths in the intelligent use of experts in the solution of legislative problems. This question is one which ought not to be legislated upon without the light of expert and unbiased educational judgment. To legislate on such a technical question in the absence of an expert survey of the problem is to legislate in the dark.

In this connection one word should be said on another phase of the general problem of education for a state. One of the arguments used to justify this transformation of the normal schools is the plea that the undergraduate schools in the state universities are overcrowded and need relief, and the transformation of normal schools into colleges will effect such relief, leaving the state university free to deal with university work. It is true that a number of state university undergraduate schools are over-

crowded. This is the result of many causes. In some states low standards and advertising methods have brought more students than the state university can teach wisely. In other states the number of fairly prepared undergraduates is becoming too large for the instructing staff. Where the enforcement of decent standards and the dropping of advertising methods does not meet the situation, some other solution will be sought, but that is no argument for diverting the normal schools from the specific work for which they were created.

STATE AID WITHOUT STATE CONTROL

The participation of endowed institutions in state aid has so greatly increased in recent years as to form a distinct question of public policy, and one which has hitherto received scant attention.

We have proceeded in the various American commonwealths upon the theory that there were two methods of conducting higher education: one the method of government support and control, the other the method of private endowment and control. Each of these plans is clear-cut and is politically consistent. There has, however, grown up in the last ten or fifteen years a movement which contemplates a mingling of these two plans,—an institution drawing large appropriations from the state, but over which the state exercises no authority. This movement has obtained headway mainly in the New England and Atlantic states, and particularly in those states where there is no tax-supported university. Indeed, one of the arguments which has been most commonly used in the appeal to legislatures for such appropriations has been the plea that it was necessary for privately endowed institutions to meet what is called the “educational competition” of the great tax-supported universities, and that the states where no state university had been founded should therefore assist the privately endowed institutions. In this situation again the question of college competition has been made to play a large rôle.

In the New England states New Hampshire makes a grant to Dartmouth College nearly twice as large as the grant to its state college of agriculture and mechanic arts. Vermont gives subsidies to all three of the privately endowed institutions of higher education in the state, the University of Vermont (which is not a state university), Middlebury College, and Norwich University.

In Massachusetts the legislature a few years ago made large continuing grants to the Massachusetts Institute of Technology, and a year later similar, but smaller grants to the Worcester Polytechnic Institute. In the state of New York public funds are granted, under somewhat more carefully framed conditions, to Cornell University, Alfred University, St. Lawrence University, and Syracuse University. In Pennsylvania state aid to privately controlled educational and philanthropic institutions—universities, schools, hospitals, etc.—has been developed to an extent unequalled elsewhere. Among the institutions which now participate extensively in state

aid are the University of Pennsylvania in the eastern part of the state and the University of Pittsburgh in the western. All Pennsylvania legislation is arranged so as to be reciprocal in the geographic sense.

The state of Maryland has long paid subsidies to privately endowed colleges. The charter of St. John's College at Annapolis, granted in 1784, pledges the state forever to some support of the college. A few years ago Johns Hopkins University became, by legislative action, one of the recipients of state aid, and this has recently been largely increased in order to provide for a school of applied science. The institutions now sharing in this bounty draw from the state treasury an annual appropriation of over \$300,000, and include Johns Hopkins University, St. John's College, St. Mary's Seminary, McDonough Institute, Charlotte Hall Academy, F. Knapp's English and German Institute, Universal Progressive School, St. Francis Xavier school, National Junior Republic, Washington College, and a number of others. The state of Virginia, in addition to the support of its state university, also subsidizes with smaller sums institutions under independent control.

This brief statement is not intended to give any complete list of the educational institutions under private control which now participate in state funds, nor is this matter mentioned now with the purpose of criticizing any of these institutions. Certainly, institutions like the Johns Hopkins University, the Massachusetts Institute of Technology, and the University of Pennsylvania are among the most deserving institutions of their states. It is, however, important that the political significance of this movement, which has already gained such headway, should be clearly understood. The appropriation by the state for the support of educational and philanthropic institutions over which it has no control is a questionable public policy. It does not alter the matter that many of these institutions are most useful and valuable agencies in their states, altho it can readily be shown that the obtaining of state aid by such institutions has already paved the way for state aid to less worthy agencies. The real question to be faced is this: such legislation forms an opening wedge for paternalistic and socialistic measures, whose end no man can foresee. If these institutions, whose friends are now in power, can get appropriations, a little later other institutions of assumed philanthropic character, controlled by this or that body, will have an equal claim to support. There is only one safe line that can be drawn consistently with our political traditions and experience, and that is that state aid shall go only with state control. When a commonwealth initiates the policy of state aid without state control, it embarks upon a legislative process which may ultimately put the power of the state at the disposal of any enterprise which claims to be philanthropic or educational, no matter by what sect, by what party, or by what political theorists it may be controlled. Such legislation is full of dangers, and in states like Massachusetts it requires no prophet's vision to perceive them.

The questions here touched upon—the politically appointed board of trustees, the rivalry and consequent log-rolling incident to divided state institutions, the tend-

ency of tax-supported institutions to leave their legitimate field of work for some other, the movement among endowed colleges to obtain state aid without state control—are all questions of immediate educational and political concern. They touch not only local and temporary interests, but national tendencies of a far-reaching nature. In the larger sense education and politics can never be separate and isolated things; they form related parts of the intellectual, social, and economic strivings of a people. But they will be worthy each of the other only when both rise above the plane of personal and local self-interest.

SHAM UNIVERSITIES

It is apparently profitable for a considerable number of persons to traffic in the functions of an institution of higher education. Sometimes the pretense is due merely to ignorant ambition, like that of the High Educational College of Glory, in Boston. Oftener it is due to a deliberate intention to deceive, for the sake of financial profit.

Oriental University in the city of Washington is a type of the institution conducted by men whose lack of knowledge displays itself in an extravagant use of language, and who seek to draw paying students by making what appears to the authors to be an immense display of learning. The printed circulars of this institution are a farrago of nonsense at once ludicrous and pathetic. The institution was "Founded 1903 as Oriental Mission Seminary, in Boston, Mass. Chartered as Eastern University in the District of Columbia, in 1904; as Oriental University in Virginia, in 1908; and as Universal University in Arizona, in 1911." A recent unsolicited testimonial says: "Oriental University will grow and even get in time into good financial standing,"—perhaps because "every Student, Graduate, Professor or Friend . . . are entitled to 10 per cent commission of whatever money is received during one year through their solicitation." The president bears the degrees of Ph.D., S.T.D., S.O.D., LL.D., and informs the Foundation that his salary is \$900 a year, unfortunately not always paid. He is announced in a late catalogue not only as president of the university, but as head of every department for which a name sufficiently mouth-filling can be discovered to make it sound impressive. Thus he is dean of the Orientalistic Seminary, the head of the Indian section and of the comparative language section of this seminary, and a professor in the West Asian and African section, and in the European, American, and Oceanic sections. He is also announced as head of the department of foreign missions, head of the department of philology, professor in the classical college, in the department of theomonistic theology, the department of religions, the department of philosophy, the department of pedagogy, the department of literature and art, and the department of civil service. Another circular makes him professor in the departments of literature, journalism, and drama; and of international law and diplomacy. He is not announced as a professor in the department of aeronautics, but the university announces such a department, giving work leading to the degree of

Bachelor of Aeronautics. A "select and abbreviated list of courses actually taught by this University" includes such subjects as History of the World, Penmanship, Claim Collection Business, Biblical Hermeneutics, Evolutionism, Theoretical Therapeutics, Gaelic, Japanese, Vedantic Philosophy, and Practical Courses in Psychic Mediumship and in Spirit Photography. Twenty-three varieties of degrees—nine bachelors, eight masters, and six doctors—may be earned by non-residents. For the year 1911-12 the catalogue lists 6 resident and 24 non-resident students.

Such a pretentious ignorance might be regarded as too transparent to deceive any one in this country of public schools, did not one remember the accounts constantly appearing in the press concerning the dupes of persons who attract chiefly by a similar wealth of sonorous jargon. The federal government ought not to tolerate within the limits of its exclusive jurisdiction a "university" which indulges in such false statements as the following: "The standard of the Oriental University in its undergraduate schools, is higher even than that proposed by the National Associations of State Universities and of the Carnegie Foundation. Our graduate non-resident schools, too, if properly understood and valued, are at least as high as any graduate schools in America, whether resident or non-resident;" "a graduate completing our graduate non-resident courses will not fail in a competition with graduate students of Berlin, Oxford, and Harvard Universities."

A summary of the recent history of one deliberately dishonest institution may be given as representative of the class. During the past year a considerable number of correspondents inquired of the Foundation concerning the character of the so-called "Carnegie University" of Wilmington, Delaware. An examination of its printed circulars showed them to be thoroughly false and misleading. The resources of the institution were thus represented: "Surmounting the summit of a high hill, in the best location in the city, the colossal buildings command a magnificent view of the entire country for miles around." "Those coming to Wilmington . . . can see the mighty university long before they reach the city." "Affiliated with Carnegie University throughout the world, there are a number of educational institutions. . . . Many of them are owned by the University." Illustrations showed one eight and one twelve story corner building, both bearing the name *Carnegie University* along the length of each visible side. An affiliated institute was described as "at 128 West 66th Street, one of the most prominent and busiest corners of the City of New York," and illustrated as occupying a five-story double building, bearing the sign, *National Institute of Mechano-Therapy, Affiliated with Carnegie University*, across three floors. Inquiry revealed that the former buildings were office structures in Wilmington. The "University" had at times had an office in each building, and was expelled from one of them, but the buildings at no time displayed the name as pictured, and no one was found in Wilmington who had ever seen a resident student. The latter buildings in New York were residence flats, which did not bear the sign indicated, were not on a corner, and the nearest corner was neither prominent nor particularly busy.

The announcement of courses, leading to twenty-four different degrees, proved to be padded with descriptions conveyed bodily from the circulars of reputable institutions. Thus, the course leading to the degree of doctor of literature was taken from the annual register of the University of Chicago. The entire offering of the "Graduate College of Law" was taken from the year-book of the Catholic University of America. The entire offering of the "Graduate College of Pedagogy" was taken from the announcement of the school of pedagogy of New York University.

The educational standing of the institution was falsely represented by statements like "We are known . . . all over the globe." "Carnegie University is the oldest, largest, best and most renowned Institution of learning of its kind in the world. It was initiated, promoted, and financed by a few of the world's greatest philanthropists. . . . The University was appropriately named in honor of Carnegie, a great Philanthropist." "Carnegie University has granted honorary degrees to Carnegie." Mr. Carnegie, of course, received no such degrees.

The statement "Carnegie University is a member of the American Association of Accredited Universities, Colleges and Institutes, and of the Universal Association of Accredited Universities, Colleges and Institutes, etc., etc.," suggested falsely that the institution had a good repute among universities. The associations mentioned are not representative, and, so far as I know, do not exist; their names, however, resemble that of the Association of American Universities, a representative body. The same is true of the statements, "BAR ASSOCIATION OF NORTH AMERICA. To this association are admitted graduates of our Law Department," and "INTERNATIONAL BAR ASSOCIATION. To this association are admitted graduates of our Law Department." These associations are not representative, and, so far as I know, do not exist; their names, however, resemble that of the American Bar Association, a representative body. Other phrases like "such great educators of world-wide reputation as the late President Harper, of the University of Chicago; President Elliot [*sic*], lately of Harvard University, and President Homan Vanderheide, of Carnegie University," were used to imply that the president of this institution was worthy of mention in connection with noted educators. He proved, on the contrary, to have been convicted by the Medical Society of the county of New York of the illegal practice of medicine.

The character of the instruction offered was falsely represented by the repetition of phrases like "the best possible facilities;" "this Correspondence Department of our University is far superior to any other in the world;" "the exhaustive explanations . . . are vastly superior to the lectures delivered at any university in the world;" "the courses are now without a peer in existence." "The services of the greatest authorities in the world have been enlisted in the preparation of these peerless courses. Immense amounts of money have been spent. The world over has been ransacked in preparing them, and neither time, money nor labor were considered in making these the very best courses in existence." "The information we impart is the most important of which a human being can be possessed."

False hopes of "gigantic success," "power, independence and wealth," and the like were held out to students, — "our students when graduates are exceedingly well qualified to be preëminently successful in their respective professions . . . nearly every one of our graduates are now receiving exceedingly lucrative incomes and have signally distinguished themselves in their respective professions." Equally misleading were the suggestions of the ease with which this success could be obtained: "the student regardless of age, previous education, or location, cannot fail to acquire a perfect practical and theoretical knowledge and understanding of the subject studied . . . you positively can learn to be a lawyer, clergyman, or a professor or an author, etc.;" "students are enabled to earn as they learn . . . the opportunity is also given to them to practice their new professions long before they graduate." "Anyone, anywhere, anytime . . . could be acquiring an education in one of these great professions . . . carrying on advanced study, research, and investigation." "WE ABSOLUTELY GUARANTEE SUCCESS in the study of these uplifting, profitable professions."

The statements quoted are representative of many others in the announcements of "Carnegie University" in their falsity, and their evident intention to mislead.

Inquiry revealed that under a Delaware law, not unlike that of most states, the "University" was legally chartered to give any instruction and confer any degrees, in any subjects, in any part of the world. In December, however, the Journal of the American Medical Association attacked the practices of the "University," and in April the New York County Medical Society caused the arrest of its New York representative for practicing medicine without a license.

On May 4 the federal authorities arrested the president and the secretary of this institution for using the mails in a scheme to defraud. They were taken before a United States commissioner, who fixed the amount of their bail at \$3000 each for their appearance at a hearing to be held before him on May 22. They were imprisoned for some days until bail was secured, and this action practically closed the institution. When the day of the hearing arrived twenty or more witnesses were present in behalf of the government, but the defendants failed to appear, their bonds were declared forfeited, and they are now fugitives from justice.

The abuses represented by these two institutions are far from uncommon. Very few of the states make any effective differentiation between educational corporations and ordinary business corporations, and allow the former to be incorporated as freely as the latter. To hold out a corporation as a bank, the incorporators must fulfil certain conditions as to paid-up cash capital to the satisfaction of the state commissioner of banking; to hold out a corporation as an insurance company, cash resources sufficient to cover the ordinary actuarial risks must be offered for the approval of the state commissioner of insurance. But in the large majority of the states incorporators can hold out a corporation to the community as a college or a university without fulfilling the simplest requirements to show that they can do what the state has given them the right to allege that they can do.

As an illustration of this condition, the District of Columbia may be chosen. The sole requirement for becoming a college or a university in the District of Columbia is that any five persons sign a document stating it to be their intention so to incorporate. Upon being presented with such a document, the recorder of deeds of the District is forced to record it, and the petitioners thereupon become a college or a university corporation. The recorder has no discretion to withhold the creation of the college or university corporation; it is merely a ministerial act, and a refusal could be immediately overcome by peremptory mandamus. No other official has any semblance of authority in the matter. Therefore, any five citizens of the United States, residents anywhere, altho all of them might be unable to read and write, and might be dependents of the community in a poorhouse, can form themselves into a university, "under authority of an act of Congress."

It is hardly an exaggeration to say that this has actually been done. Instances will be given of universities whose organizers and trustees, if able to read and write, indicate by the manner in which they framed their university charters that they have raised themselves little in knowledge or intelligence by not being absolutely illiterate. The official reports that these universities are required to make annually prove that they have literally no resources, and indicate with fair conclusiveness that their organizers and trustees are perilously near the same predicament.

Thus, on April 13, 1903, the recorder of deeds was forced to record the charter of incorporation of The International Inter-University Post-Graduate Association, whose object legally was set forth to be "to establish and endow an American National and International Inter-University," and "to conduct the representative affairs of the same, as a Representative Universal, Central Institute of Pathology, Pansociology and Panhumanity."

To accomplish these ambitious resolves, the objects for which the charter was obtained were further elucidated: "To inaugurate and maintain such inter-university, in the figure and form, of an Ideal Cosmopolitan Institutional Republic of Letters, Art, Science, and of the Humanities; for the comprehensive study of the same; for the complete Federation and just Promotion of the Representative Best of the Finer and Greater Affairs of Mankind, Secular and Spiritual, most insistent, in the inner and outer sides of the modern Christian and Ethic Civilization. To expand the Catholicity, Newness, Comprehensiveness, and Effectualness of such Inter-University, beyond and far in advance of the Beneficence of existing institutions of Learning, Culture and Philanthropy; therein and by, to render such Inter-University eminently available, as the Alma Mater of Ultimates, to and for, Philotechnic, Philharmonic, Litterateur, Connoisseur, Protagonist, and Postgraduate Genius, as well as, to and for, Young and Rising Genius, to render such Cosmopolitan Inter-University-Imperium desirable, practicable, and effectual: first as the Alma Mater of Theoretic Ultimates, pertaining to the Scientific, Systematic Orthologic and Mathematical professions; second, as the Alma Mater of Technic Ultimates pertaining to the Esthetical, Emotional,

Musical, Theatrical, Recreational, and Connoisseur professions," and so on, for several large official pages with which it is not necessary to burden the readers of this report.

The hopes of the incorporators that their Inter-University would be "beyond and far in advance of the Beneficence of existing institutions of Learning" for "Post-graduate Genius" and for "Young and Rising Genius" have not yet been realized, as the annual reports show. In 1906 the officers certify "that the endowment fund of said company is to be large, of which not any donation has been made." In January, 1908, it is hopefully certified "that the benevolent and philanthropic Endowment required for and by said Association has not in part or in full been received; but that prospect of receiving Donations in 1908, is good." As late, however, as 1911 the president and a majority of the board of trustees of the Inter-University were compelled to sign a certificate stating "that it is waiting an Endowment Foundation; that not any Bequests have been received, and that not any money has been paid in." A certificate with the same sad account was filed on January 19, 1912.

Numerous other colleges and universities of the District of Columbia certify in their annual reports property not much exceeding that described so succinctly above. The officers of the Universitas Veterinaria Glanderini Arabii certify that the "Universitas" possesses the following property: "One microscope, about fifty books and lectures (typewritten) on veterinary science, a department of glanderine, fully equipped for the manufacture of veterinary remedies, and stock in hand to the value of \$50." The National College of Osteopathic Physicians and Surgeons, which possesses a charter giving it the right to confer the degrees of "professor of physiology and pathology, professor of neurology, psychology and ophthalmology, and professor of applied anatomy and physiology of the eye and brain," and so on thru most of the medical sciences, certified in 1907 that its property consisted of the following:

Seal	\$7.50
Printed Matter	30.00
Diplomas	140.00
Furniture and Fixtures	95.00
Total	<u>\$272.50</u>

The Potomac University, which is established in a dwelling-house in Washington, certified in 1908 that its cash assets, including bills receivable, amounted to \$450. It also had a "library of five thousand books, office furniture, desks, chairs, and typewriters." Washington Christian College, also located in a dwelling-house in Washington, certified in 1911 that its property consisted of \$700. The American International University is more opulent than most of the others. In addition to office furniture and a library of twelve thousand volumes, it has certified that it owns real estate situated in Mexico and "valued at \$31,000."

It is unnecessary to enumerate the array of institutions bearing such names as the University College, the American Capitol University, the Federal University of America, the University of the United States of America, the North American

University, the University of North America, Washington University, and so on, which have been incorporated during the last ten years in the District of Columbia with such full university powers as the following, which is taken from the charter of the University of the United States of America, incorporated in 1905: "The particular branches of literature and science proposed to be taught either by correspondence or personal attendance are as follows: Liberal Arts and Applied Science, Languages, Architecture, Drawing, Sculpture, History, Music, Graphics, Civil Engineering, Electrical Engineering, Mechanical Engineering, Mining Engineering, Chemical Engineering, Botany, Zoölogy, Anatomy, Meteorology, Astro-Physics, Mineralogy, Geology, Physics, Philosophy, Philology, Assaying, Theology, Law, Medicine, Surgery, Dentistry, Chemistry, Pharmacy, Osteopathy, Osteotherapy, Scientific Medical Massage, Chiropractic, Electro Therapeutics, Chiropody, Psychology, Economics, Mathematics, Bookkeeping, Penmanship, Banking, Correspondence, Stenography, Telegraphy."

A similar latitude of university powers is expressed in a different form in the charter of Monroe College, also incorporated in 1905, by which it is given the right to confer "such academical or honorary degrees as are usually conferred by similar institutions, more particularly the following degrees, to wit: A.B., B.A., A.M., M.A., P.B., Ph.B., Ph.G., Ph.D., V.S., M.R.C.V.S., F.H.A.S., M.D.C., M.D.V., D.V.S., B.Z., B.B., E.M., B.S., C.E., E.E., M.E., M.M.E., M.S., S.M., S.B., S.D., S.T.B., M.F., M.B., M.D., B.C.L., J.C.D., D.C.L., J.D., J.U.D., LL.B., LL.M., LL.D., L.H.L., Litt.D., B. es L., B.Cc., B.C.D., Pd.B., A.C.C.S.M., L.C.C.S.M., B.M., M.M., Mus.D., D.D.S., S.T.P., B.D., S.T.D., D.D., D.C., D.M., M.E., D.E., D.P., D. Psychol., M.S., H.D., Sc.D., and A.E."

Nor do the universities incorporated in the District of Columbia confine themselves merely to educational work, however broad. Washington University sets forth in its charter that it is incorporated for the following objects:

- "1. To aid in the advancement of education.
- "2. To succor innocence and punish guilt.
- "3. To defend the helpless and oppressed.
- "4. To maintain the rights of men and women.
- "5. To further the advancement of the sciences and arts and American law, jurisprudence, and diplomacy.
- "6. To establish justice to ourselves and our posterity.
- "7. To solve the great legal, constitutional, and diplomatic questions which are constantly being evolved in the ever changing affairs of life."

Odessa University, whose head office is at Odessa in the state of Washington, with a branch at Seattle, and whose articles of incorporation in the District of Columbia are sworn to before a notary public in the state of Washington, is incorporated for the following objects:

- "First. Acquire, build, make, use, and dispose of real estate and personal prop-

erty of every description, name and nature, particularly buildings and other equipment suitable for teaching, instructing, lecturing, printing, taking care of the sick and unfortunate, as in a University, Lecture Room, Printery, Library, Hotel, Hospital, and Museum, and employing professors, teachers, lecturers, experts, nurses, and others, to give instruction and assistance, free or for pay.

“Second. To ask for donations, aid, and assistance, and to receive anything, cash or its equivalent for a trust, or by will, and to act as an executor or administrator, or to establish a fund for an income, or for any particular object.”

This would indicate that the incorporators of Odessa University were thinking more of the business that might be transacted under the aspect of an educational institution than of education itself. It has a capital stock of \$500,000 divided into shares of \$1 each, which is a usual provision of many of these institutions, altho generally the capital stock is fixed at some figure in the millions. That the incorporators of these institutions have a shrewd business instinct may be shown by the provision in the charter of one of them whereby one of the incorporators, who is declared to be the founder, “is herein and by, constituted president of the same, during the term of natural life, with power to nominate a successor.” This is a centralization of university government heretofore unknown.

In the pioneer days of the west individuals financially irresponsible were allowed to incorporate banks and issue notes to those who would take them, the principle of *caveat emptor* being applied to the community. Those days are past; the state considers it to be its duty not to allow its prerogative of incorporation to be used for banking purposes without exacting certain guarantees designed to protect the community from loss of property. There was a time, not very remote, when most states were glad to have any one undertake any educational enterprise, and laws were framed so as to facilitate all such efforts. Now, however, that this pioneering stage is over, and we have enough examples of worthy and excellent institutions to demonstrate the real meaning of higher education, it is time for the laws to recognize present conditions, and to be as solicitous to prevent the people from being robbed of their time and money by irresponsible colleges as of their money alone by irresponsible banks. The Supreme Court of the United States in the Berea College Case intimated that because a citizen was engaged in teaching was no reason why he was more subject to the police power of the state than if he were engaged in any other occupation; with such freedom there is no desire to interfere. But the Supreme Court in the Berea College Case and in hundreds of other cases has illustrated the fundamental principle that a corporation is the absolute creature of the state, to create which is a prerogative of the state alone. It is not consonant with the traditions or ideals of our race to erect education into a monopoly of the state, as it is in France, which would effect too minute an inspection and control of educational corporations. But it is certainly mere justice to ask that the state shall not allow its unique power of creating corporations to be used in sending forth colleges and universities into the world with-

out the assurance that they are neither fraudulent, nor so inadequately equipped as necessarily to be deceptive.

Citizens of the District of Columbia, disinterestedly solicitous concerning educational matters there, are preparing for introduction in Congress a bill which, while so simple in its requirements as not to bar any bona fide institution, will prevent effectually such instances of fraud or ignorance as have been exhibited. The two salient provisions of this proposal are: first, that any institution incorporated with capital stock must comply with the provisions of the law of the District relating to business corporations, and cannot by taking the title of college or university incorporate as an institution of learning. The second provision is that no institution bearing the title of college or university, or having the right to confer degrees, shall be incorporated until the commissioners of the District of Columbia are satisfied that it possesses, in the case of a would-be college, property of the actual value of \$20,000, or in the case of a university, property to the actual value of \$100,000. These sums are so small that no bona fide institution will fail to satisfy them. The collegiate institutions of the Roman Catholic Church are almost universally conducted by Orders, whose members receive nothing beyond their maintenance, and can hence be conducted upon a much smaller expenditure than is required where the faculty receive salaries, but even these colleges would always start with property worth considerably more than \$20,000.

The proposed bill, in order to be perfectly just, should declare that it does not affect college and university corporations previously incorporated, whether by the general law of the District or by a special act of Congress. This would leave untouched the charters of such institutions as the Georgetown University and the George Washington University, incorporated under special acts and engaged sincerely in providing educational opportunities for the resident population of Washington. It would also leave untouched the charters, obtained under the general law, of the Catholic University of America, a standard institution of higher education, and the Boone University of China which, under the auspices of the Episcopal Church, is engaged in the work of spreading Western learning in the East. As all legislation for the District of Columbia must be enacted by the Congress of the United States, it is to be hoped that citizens in all the states, who are interested for the sake of honest and sound education in ending this condition of affairs in the District, alike annoying to the residents of the District and to the citizens of the states, will acquaint their senators and members of Congress with their desire that this proposed legislation, which can interfere only with unworthy institutions, may be speedily enacted into law.

In only three states of the Union — New York, New Jersey, and Pennsylvania — is there any legislation, so far as is known, safeguarding the granting of collegiate degrees. In most of the other forty-five states, if not in all of them, the legal situation is very similar to that prevailing in the District of Columbia. It is surely the

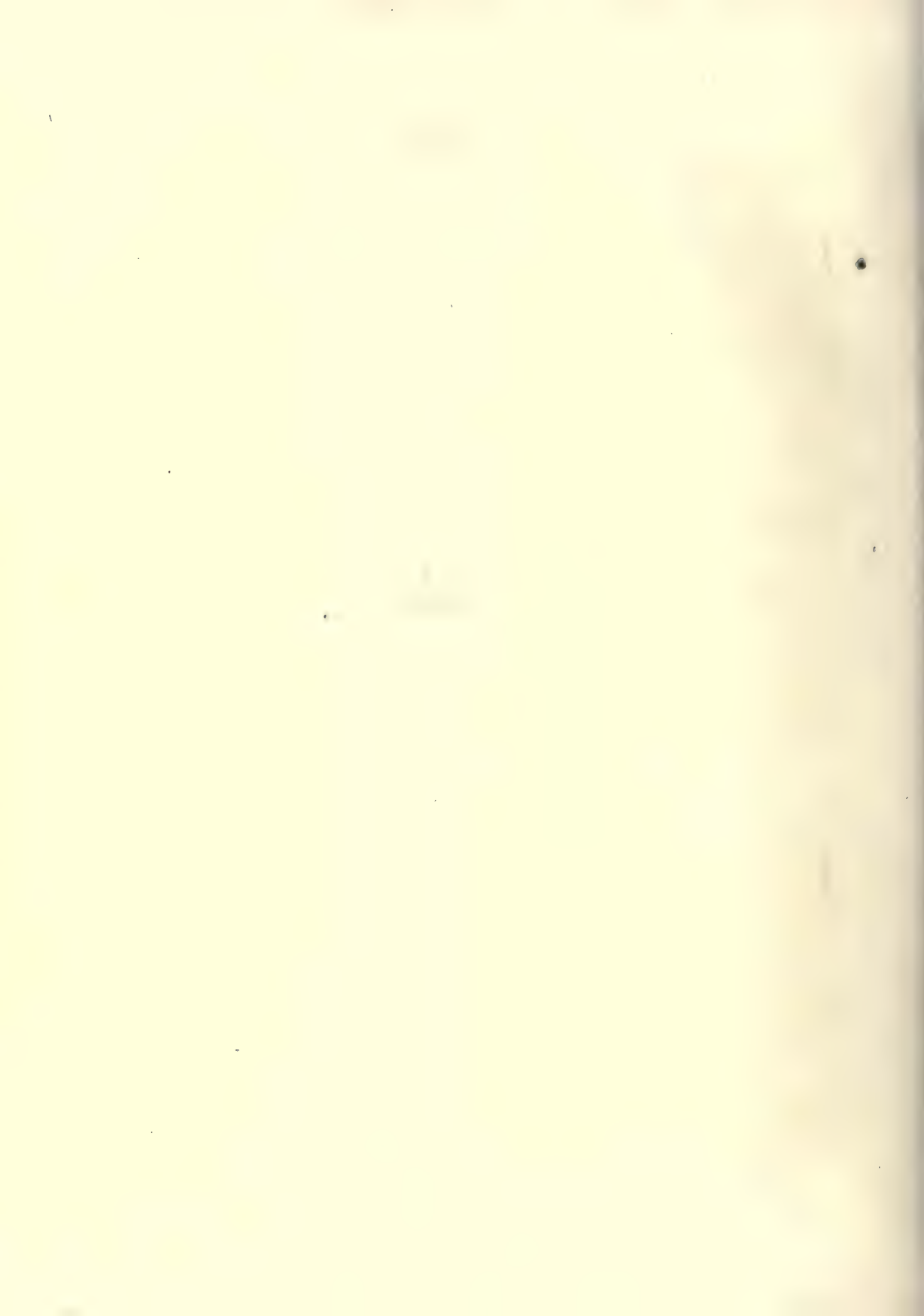
duty of good citizens, each in his own state, to labor for the enactment of some simple legislation like that now urged on Congress for the District of Columbia, to prevent the exploitation of innocent people by fraudulent and ignorant associations of promoters, working behind the corporate title of a college or university.

HENRY S. PRITCHETT.

October 25, 1912.



PART III
DE MORTUIS



DE MORTUIS

HENRY TAYLOR BOVEY

HENRY TAYLOR BOVEY was born on March 7, 1852, in Devonshire, England, and was educated at the University of Cambridge, obtaining, upon his graduation, a high place in the mathematical tripos. Shortly afterward he was elected a fellow of Queen's College. He joined the staff of the Mersey Dock and Harbor Works, and was appointed an assistant engineer. In 1877 he became professor of civil engineering and applied mechanics in McGill University, the following year being appointed dean of the faculty of applied science. These offices he held until 1908, when he returned to England to accept the position of rector of the Imperial College of Science and Technology. Ill health compelled him to resign in 1910.

Professor Bovey was one of the founders of the Canadian Society of Civil Engineers, and its president in 1900. He was a member of the Institution of Civil Engineers of England and of the Liverpool Society of Civil Engineers, a fellow of the Royal Society of Canada, and an honorary member of the National Electric Light Association of the United States. The University of Bishop's College conferred upon him the degree of doctor of civil law, and McGill University and Queen's University the degree of doctor of laws. He was made a fellow of the Royal Society in 1902, and an honorary fellow of Queen's College, Cambridge, in 1906.

Upon the nomination of the governors and fellows of McGill University, the Carnegie Foundation, on April 9, 1908, granted Professor Bovey a retiring allowance, which became operative upon his retirement from active educational work in 1910. He died on February 2, 1912.

LEWIS ORSMOND BRASTOW

LEWIS ORSMOND BRASTOW was born on March 23, 1834, in Brewer, Maine. He was graduated from Bowdoin College in 1857, and from the Bangor Theological Seminary in 1860, and was ordained into the Congregational ministry in 1861. From 1861 to 1873 he was pastor of the South Congregational Church in St. Johnsbury, Vermont, serving in 1862 and 1863 as chaplain of the Twelfth Vermont Infantry. From 1873 to 1884 he was pastor of the First Congregational Church in Burlington, Vermont. He was elected a member of the constitutional convention of Vermont in 1870. In 1885 he accepted the chair of practical theology in Yale University, and served for a time as dean of the divinity school. He received the honorary degree of master of arts from Yale University in 1885, and the degree of doctor of divinity from Bowdoin College in 1880. His publications were *Representative Modern Preachers* (1904) and *The Modern Pulpit* (1906).

Upon the nomination of the board of fellows of Yale University, the Carnegie Foundation, on July 9, 1907, granted Professor Brastow a retiring allowance. He died in New Haven on August 10, 1912.

CHARLES H. CHANDLER

CHARLES H. CHANDLER was born on October 25, 1840, in New Ipswich, New Hampshire, and was educated at Dartmouth College, from which he was graduated in 1868. From 1857 he had been teaching in district schools and in the academy at New Ipswich, and upon his graduation he became principal for one year of Meriden Academy, and then principal for two years of St. Johnsbury Academy, Vermont. In 1871 he was appointed a professor in Antioch College, and remained there for ten years. In 1881 he accepted the chair of chemistry and physics in Ripon College, which he resigned in 1883 for the chair of mathematics. Professor Chandler repeatedly held local offices in Ripon, and in New Ipswich, where he lived after his retirement.

Upon the nomination of the board of trustees of Ripon College, the Carnegie Foundation, on June 7, 1906, granted to Professor Chandler a retiring allowance. He died at Leominster, Massachusetts, on March 29, 1912.

THOMAS N. CHASE

THOMAS N. CHASE was born on July 18, 1838, in West Newbury, Massachusetts, and was educated at Dartmouth College, from which he was graduated in the class of 1862. For two years following his graduation he was principal of Royalton Academy, Vermont, and after several years spent in business pursuits, he began in 1869 his connection with Atlanta University. From 1869 to 1888 he was professor of Greek, and from 1895 to 1906 professor of Latin, serving also at times as dean and acting president, and being for twenty-eight years a member of the board of trustees. From 1891 to 1893 he was principal of the Burrell School at Selma, Alabama, and he also served the American Missionary Association in making a tour of inspection of Indian agencies in the Northwest, and of the Mendi Mission on the west coast of Africa.

In recognition of his long service in the education of the negro race, the Carnegie Foundation, on July 26, 1906, granted Professor Chase a retiring allowance. He died at Bellows Falls, Vermont, on April 23, 1912.

SARAH A. FRIERSON

SARAH A. FRIERSON was born in September, 1837, at Athens, Georgia. She was educated at the Grove School, and in 1887 she was appointed the first librarian of the University of Georgia, which position she held until 1904. In that year, when the University of Georgia received a new library building and equipment thru private beneficence, Miss Frierson preferred to accept the post of assistant librarian, which she occupied until her retirement in 1909.

On account of Miss Frierson's long devotion to the upbuilding of an important part of the University of Georgia, the Carnegie Foundation, on September 30, 1909, granted her a retiring allowance. She died in Athens, Georgia, on March 10, 1912.

NORMAN ROBERT GILLIS

NORMAN ROBERT GILLIS was born on July 25, 1883, at Brookfield, Prince Edward Island. He was educated at McGill University, from which he was graduated with the degree of bachelor of arts in 1908; in 1909 he received the degree of master of science. Upon his graduation he was appointed demonstrator in physics in McGill University, and in 1909 he was made lecturer in physics.

Mr. Gillis having been ordered to take up his residence in a health resort on account of disability, the Carnegie Foundation, upon the recommendation of the governors and fellows of McGill University, on October 13, 1910, voted him a temporary allowance. He died at St. Agathe des Monts, Quebec, on April 2, 1912.

THOMAS HUME

THOMAS HUME was born on October 21, 1836, at Portsmouth, Virginia, and was educated at the Virginia Collegiate Institute in Portsmouth and at Richmond College, from which he was graduated in 1845. After three years of graduate work in the University of Virginia, he became professor of French and English literature in Chesapeake Female College, and also entered upon the work of a Baptist minister. In 1861 he entered the Confederate army, serving first as chaplain of the Third Virginia regiment, and later as chaplain of Petersburg during the siege.

Upon the close of the war he became president of Roanoke College, Danville, Virginia, serving from 1868 to 1873, part of this time being also pastor of the local Baptist congregation. From 1874 until 1885 he was pastor of the First Baptist Church in Norfolk, Virginia. From 1880, in addition, he acted as professor of English and Latin in Norfolk College. In 1885 he was appointed professor of the English language and literature in the University of North Carolina; in 1901 his chair was changed

to that of English literature exclusively. Professor Hume wrote numerous books on literary subjects, and received the degree of doctor of divinity from Richmond College, and the degree of doctor of laws from Wake Forest College and from the University of North Carolina.

The Carnegie Foundation, on account of Professor Hume's pioneer work in teaching English literature in the South, granted him a retiring allowance on December 10, 1906. He died at Chapel Hill, North Carolina, on July 15, 1912.

OTIS COE JOHNSON

OTIS COE JOHNSON was born on September 11, 1839, at Kishwaukee, Illinois, and was educated at Oberlin College, from which he was graduated with the class of 1868. He graduated from the school of pharmacy of the University of Michigan with the degree of pharmaceutical chemist in 1871, and in 1873 was appointed assistant in chemistry in the University of Michigan with the duty of giving lectures to classes. In 1880 he was appointed assistant professor of applied chemistry, and in 1889 professor of applied chemistry; in 1907 his title was changed to professor of qualitative analysis. Professor Johnson was a fellow of the English Chemical Society, and of the American Association for the Advancement of Science, and a member of the American Chemical Society, and of the Deutsche Chemische Gesellschaft. He was one of the authors of Prescott and Johnson's *Qualitative Chemical Analysis*. He received the degree of master of arts from Oberlin College in 1877.

Upon the nomination of the board of regents of the University of Michigan, the Carnegie Foundation, on October 19, 1911, granted Professor Johnson a retiring allowance. He died in Ann Arbor on June 6, 1912.

GEORGE WILLIAM JONES

GEORGE WILLIAM JONES was born on October 14, 1837, at East Corinth, Maine, and was graduated from Yale University in the class of 1862, receiving the degree of master of arts three years later. He was a teacher of mathematics in Russell's Military School at New Haven from 1859 to 1862, and at the Delaware Literary Institute, Franklin, New York, from 1862 to 1868. From 1868 to 1874 he was professor of mathematics in the Iowa State College of Agriculture and Mechanic Arts. In 1877 he was called to Cornell University as assistant professor of mathematics, in 1893 he became associate professor, and in 1895 professor. Professor Jones published several standard text-books on algebra, geometry, and trigonometry, and also works on logarithms.

Upon the nomination of the board of trustees of Cornell University, the Carnegie

Foundation, on March 28, 1907, granted a retiring allowance to Professor Jones. He died in Ithaca on October 29, 1911.

CHARLES LOUIS LOOS

CHARLES LOUIS LOOS was born on December 23, 1823, at Wörth, in the French department of Bas-Rhin (now the German Reichsland of Alsace-Lorraine). He was brought to America at an early age, and was educated at Bethany College, from which he was graduated in 1846. Immediately upon his graduation he became professor of ancient languages in the college, and held this position until 1849, when, having been ordained a minister of the Church of the Disciples of Christ, he devoted himself to pastoral duties. In 1857 he reëntered educational work as president and professor of ancient languages at Eureka College, and in the following year he returned to Bethany College as professor of ancient and modern languages, where he remained until 1880. From 1880 until 1897 he was president and professor of Greek in Transylvania University, when he retired from the presidency on account of age, but retained the chair of Greek. This chair he held until 1909, completing fifty-five years in active labor as an educator.

In recognition of the long service of Professor Loos, the Carnegie Foundation, on June 4, 1909, granted him a retiring allowance. He died in Lexington, Kentucky, on February 27, 1912.

JAMES THOMAS MURFEE

JAMES THOMAS MURFEE was born on September 13, 1833, at Murfee's Depot, Southampton County, Virginia, and was graduated from the Virginia Military Institute as first honor man in 1853. In 1854-55 he was professor of natural science in Madison College, Uniontown, Pennsylvania; in 1856-58 professor of natural science in Lynchburg College, Virginia; and in 1860-62 professor of mathematics in the University of Alabama. In 1862 he was made commandant of cadets at the University of Alabama, with the rank of colonel in the army of the Confederate States, acting for a time as lieutenant-colonel of the Forty-first Alabama Infantry, and in 1865 commanding his cadets in battle with United States cavalry in an attempt to save the university from destruction. From 1867 to 1869 he was employed by the board of trustees as the architect and superintendent for rebuilding the University of Alabama, and in 1871 became president of Howard College, Marion, Alabama. Colonel Murfee held this position until 1887, when he founded the Marion Military Institute, of which he was superintendent until his retirement. In 1874 Furman University conferred upon him the degree of doctor of laws, and in 1892 he was appointed

by President Benjamin Harrison a member of the board of visitors of the United States Military Academy, serving until 1896.

In recognition of Colonel Murfee's long and valuable service to education in Alabama, the Carnegie Foundation, on September 28, 1906, granted him a retiring allowance. He died at Miami, Florida, on April 23, 1912.

ALFRED OWEN

ALFRID OWEN was born on July 20, 1829, in China, Maine, and was graduated from Colby University in the class of 1853. After being graduated from the Newton Theological Seminary in 1858, he was ordained into the Baptist ministry, and served as a pastor in Lynn, Massachusetts, in Detroit, and in Chicago, and on the Christian Commission during the civil war. From 1879 to 1886 he was president of Denison University, and from 1886 to 1906 he was professor of philosophy in Roger Williams University, Nashville, Tennessee, serving from 1886 to 1894 also as president of that institution.

On account of Professor Owen's long service to negro education, the Carnegie Foundation, on June 21, 1906, granted him a retiring allowance. He died in Nashville on July 21, 1912.

JAMES DAVIS PORTER

JAMES DAVIS PORTER was born on December 7, 1828, at Paris, Tennessee, and was educated at the University of Nashville, from which he was graduated in 1846. After taking a law course in Cumberland University, he was admitted to the bar in 1850 and began to practice in Paris. In 1859 he was elected a member of the House of Representatives of Tennessee, and during the civil war he served as adjutant-general on the staff of Major-General B. Frank Cheatham of the army of the Confederate States. In 1870 General Porter was a member of the constitutional convention that framed the present constitution of Tennessee, and in the same year he became judge of the twelfth judicial circuit of the state. He resigned this office in 1874, having been elected Governor of Tennessee. He was reelected governor in 1876. From 1879 to 1883 he was president of the Nashville and Chattanooga Railroad Company, and in 1885 President Cleveland appointed him Assistant Secretary of State of the United States, in which office he served throughout the administration. In 1893 President Cleveland appointed him Envoy Extraordinary and Minister Plenipotentiary of the United States to the Republic of Chile, and upon his return from Santiago in 1894, offered him the circuit judgeship of the United States for the circuit which includes Tennessee, but on account of his long absence from

legal practice, Governor Porter declined. Governor Porter wrote *The Military History of Tennessee*. He was president of the Tennessee Historical Society, and in 1880 and in 1892 he was chairman of the Tennessee delegation to the Democratic National Convention.

In 1883 Governor Porter was elected a trustee of the Peabody Education Fund, and served as such for twenty-five years. In 1901 he was elected president of the Peabody Normal College, and also, in the same year, chancellor of the University of Nashville, which offices he held until 1910.

On account of Governor Porter's valuable services to the education of teachers in the South, the Carnegie Foundation, on November 15, 1909, granted him a retiring allowance. He died in Paris, Tennessee, on May 18, 1912.

EUGENE LAMB RICHARDS

EUGENE LAMB RICHARDS was born on December 27, 1838, in Brooklyn, New York. He was graduated from Yale University with the class of 1860, receiving in 1887 the degree of master of arts. In 1868 he was appointed tutor in mathematics, in 1871 assistant professor, and in 1891 professor; in 1892 he became the first director of the Yale gymnasium, and served in this capacity also for ten years. He published *Plane and Spherical Trigonometry with Applications* (1879); *Elementary Navigation and Nautical Astronomy* (1892); and numerous papers on geometry and athletics.

Upon the nomination of the board of fellows of Yale University, the Carnegie Foundation, on June 7, 1906, granted Professor Richards a retiring allowance. He died in Beach Haven, New Jersey, on August 5, 1912.

HENRY NEVIUS VAN DYKE

HENRY NEVIUS VAN DYKE was born on March 22, 1853, in Kingston, New Jersey, and was graduated from Princeton University in 1872. He entered the Princeton Theological Seminary and remained one year, but did not continue his studies, having been appointed registrar of Princeton University in 1873. This office he held until 1910. In 1876-77 he was also tutor in mathematics in the university, and from 1879 to 1883 instructor in classics and mathematics. In 1875 he received from the university the degree of master of arts.

Mr. Van Dyke's health having become seriously impaired, the Carnegie Foundation, upon the nomination of the board of trustees of Princeton University, on October 13, 1910, granted him a retiring allowance. He died in New York City on December 23, 1911.

JOHN BURKITT WEBB

JOHN BURKITT WEBB was born on November 22, 1841, in Philadelphia, and was educated at the Philadelphia High School, the Franklin Institute Drawing School, and the University of Michigan, from which he was graduated with the degree of civil engineer in 1871. He also studied at the Universities of Paris, Berlin, Heidelberg, and Göttingen during the years from 1878 to 1881. Between his early education and his matriculation at the University of Michigan he engaged in business, from 1863 to 1868 being a member of the firm of Smith and Webb, manufacturers of machine tools, Burlington, New Jersey.

At his graduation he became professor of civil engineering in the University of Illinois, which position he held until 1879. In 1881 he was appointed professor of applied mathematics in Cornell University, and in 1885 professor of mathematics and mechanics at the Stevens Institute of Technology. Professor Webb was a judge at the International Exposition of 1884, and a juror at the Louisiana Purchase Exposition of 1904. He was a fellow of the American Association for the Advancement of Science, and a member of the American Society of Civil Engineers, of the American Mathematical Society, and of the Circolo Matematico di Palermo. He wrote numerous scientific papers and invented a number of pieces of scientific apparatus.

Upon the nomination of the board of trustees of the Stevens Institute of Technology, the Carnegie Foundation, on March 28, 1907, granted Professor Webb a retiring allowance. He died in Montclair, New Jersey, on February 17, 1912.

175

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. Patterson, Teele, and Dennis, certified public accountants, to audit the accounts of the Foundation for the last fiscal year. On October 4 the books of the treasurer were accordingly turned over to this firm, whose report follows.

October 14, 1912.

WE hereby certify that we have audited the books and accounts of the Carnegie Foundation for the Advancement of Teaching for the year ending September 30, 1912, and that the accompanying Income and Expenditure Account and Balance Sheet are in accordance with the same.

The income from the investments has been duly accounted for and the expenditures have been duly authorized and vouched.

The securities representing the investments were produced to us, and the cash in bank and in hand has been verified.

(Signed) PATTERSON, TEELE, AND DENNIS,
Certified Public Accountants.

INCOME AND EXPENDITURE
FOR THE YEAR ENDING SEPTEMBER 30, 1912

Income

From Securities in the Endowment Fund		\$633,333.33
From other Investments		39,080.00
Accumulation of Bond Discount—Net		2,515.33
Interest on Bank Balances		1,557.90
<i>Total Income for the year</i>		\$676,486.56

Expenditure

RETIRING ALLOWANCES:

To Professors, Officers, and Widows in Accepted Institutions		\$441,984.64
To Professors, Officers, and Widows not in Accepted Institutions	128,438.39	\$570,423.03

ADMINISTRATION:

Salaries		\$25,386.66
Traveling Expenses of Trustees, Officers, and Assistants		2,990.47
Rent		4,899.96
Postage		705.94
Stationery and Office Supplies		880.14
Professional Fees		601.25
Depreciation of Furniture and Fixtures, 10%		600.43
Telephone and Telegraph		204.40
Miscellaneous	680.06	\$36,949.31

PUBLICATION:

Bulletin Number Six:		
Printing	\$15,164.21	
Labor, Postage, Mailing, etc.	2,556.23	\$17,720.44
Sixth Annual Report:		
Printing	\$3,245.63	
Labor, Postage, Mailing, etc.	666.91	3,912.54
Printing Minutes, and Reprints		144.40
Salary of Assistant	2,000.00	\$23,777.38
<i>Carried forward</i>		\$631,149.72 \$676,486.56

REPORT OF THE TREASURER

179

	<i>Amount brought forward</i>	\$631,149.72	\$676,486.56
STUDY OF PROFESSIONAL EDUCATION:			
Salaries	\$1,420.53		
Traveling Expenses	764.40		
Rent	300.00		
Miscellaneous Expenses	29.99	2,514.92	
STUDY OF AGRICULTURAL EDUCATION			
Traveling Expenses		832.25	
<i>Total Expenditure for the year ending September 30, 1912</i>			634,496.89
Accumulation of Surplus Income for the Year ending September 30, 1912			<u>\$41,989.67</u>

BALANCE SHEET

SEPTEMBER 30, 1912

Assets

INVESTMENTS. <i>Exhibit 1</i>		\$13,926,202.55	
INTEREST ACCRUED ON INVESTMENTS TO SEPTEMBER 30, 1912			
<i>Exhibit 1</i>			223,538.35
CASH IN BANK AND ON HAND			13,233.52
OFFICE FURNITURE AND FIXTURES	\$6,004.31		
Less Reserve for Depreciation	3,142.28	2,862.03	
<i>Total Assets</i>			<u>\$14,165,836.45</u>

Fund and Accumulations

ENDOWMENT FUND	\$13,000,000.00		
INCOME AND EXPENDITURE ACCOUNT:			
Accumulation to September 30, 1911	\$1,123,846.78		
Accumulation for the year ending September 30, 1912	41,989.67		
Total Accumulation to September 30, 1912		<u>\$1,165,836.45</u>	
<i>Total Fund and Accumulations</i>			<u>\$14,165,836.45</u>

STATEMENT OF SECURITIES AND INCOME THEREON
SEPTEMBER 30, 1912

Exhibit 1

Par Value	Securities	Date Acquired	Date Interest due	Book Value	INTEREST			
					Accrued Sept. 30, 1911	Accrued Year ending Sept. 30, 1912	Received Year ending Sept. 30, 1912	Accrued Sept. 30, 1912
\$2,000,000.00	U.S. Steel Corporation, Series "A" Reg'd 50 year 5% Gold Bonds. Due April 1, 1951	May 3, 1911 \$1,000,000.00 Dec. 2, 1911 \$1,000,000.00	Jan. 1 & July 1	\$2,000,000.00	\$12,500.00	\$112,500.00	\$100,000.00	\$25,000.00
3,350,000.00	U.S. Steel Corporation, Series "B" Reg'd 50 year 5% Gold Bonds. Due April 1, 1951	Dec. 1, 1905	Feb. 1 & Aug. 1	3,350,000.00	27,916.67	167,500.00	167,500.00	27,916.67
3,350,000.00	U.S. Steel Corporation, Series "D" Reg'd 50 year 5% Gold Bonds. Due April 1, 1951	Dec. 1, 1905	Apr. 1 & Oct. 1	3,350,000.00	83,750.00	167,500.00	167,500.00	83,750.00
1,000,000.00	U.S. Steel Corporation, Series "E" Reg'd 50 year 4% Gold Bonds. Due April 1, 1951	May 29, 1912*	May 1 & Nov. 1	1,000,000.00		20,833.33		20,833.33
3,300,000.00	U.S. Steel Corporation, Series "F" Reg'd 50 year 5% Gold Bonds. Due April 1, 1951	Dec. 1, 1905	June 1 & Dec. 1	3,300,000.00	55,000.00	165,000.00	165,000.00	55,000.00
50,000.00	Baltimore & Ohio R. R. Co. Southwestern Division, First Mtge. 3½% Gold Coupon Bonds. Due July 1, 1925	June 9, 1906 \$20,000.00 Dec. 6, 1906 \$30,000.00	Jan. 1 & July 1	46,972.90	437.50	1,750.00	1,750.00	437.50
50,000.00	Pennsylvania Co. 4% 15-25 year Gold Coupon Loan 1906. Due April 1, 1931	June 9, 1906	Apr. 1 & Oct. 1	49,347.69	1,000.00	2,000.00	2,000.00	1,000.00
50,000.00	The Lake Shore & Michigan So. Ry. Co. 25 year 4% Gold Coupon Bonds. Due September 1, 1928	June 9, 1906	Mar. 1 & Sept. 1	49,368.74	166.67	2,000.00	2,000.00	166.67
50,000.00	Chicago, Burlington & Quincy R. R. Co. Illinois Division, First Mtge. 4% Bonds. Due July 1, 1949	Apr. 1, 1906	Jan. 1 & July 1	50,481.80	500.00	2,000.00	2,000.00	500.00
50,000.00	Southern Pacific R. R. Co. First Refunding Mtge. 4% Gold Bonds. Due January 1, 1955	Aug. 1, 1906 \$20,000.00 Apr. 29, 1908 \$30,000.00	Jan. 1 & July 1	45,832.89	500.00	2,000.00	2,000.00	500.00

95,000.00	Oregon Short Line R. R. Co. 4% Refunding Gold Bonds. Due December 1, 1929	Oct. 3, 1906 \$60,000.00 Dec. 12, 1907 \$25,000.00	June 1 & Dec. 1	87,783.31	1,266.67	3,800.00	3,800.00	1,266.67	3,800.00	1,266.67	3,800.00	1,266.67	3,800.00	1,266.67
35,000.00	Oregon Railroad & Navigation Co. 4% Consolidated Mtge. Gold Bonds. Due June 1, 1946	Dec. 6, 1906 \$30,000.00 Apr. 30, 1908 \$5,000.00	June 1 & Dec. 1	34,718.54	466.67	1,400.00	1,400.00	466.67	1,400.00	466.67	1,400.00	466.67	1,400.00	466.67
50,000.00	The City of New York Registered 3½% Corporate Stock for replenishing the Fund for Street & Park Openings. Due May 1, 1954	Apr. 3, 1907	May 1 & Nov. 1	45,362.62	729.17	1,750.00	1,750.00	729.17	1,750.00	729.17	1,750.00	729.17	1,750.00	729.17
100,000.00	Northern Pacific—Great Northern, Chicago, Burlington & Quincy R. R. Co. Collateral Trust. 4% Joint Bonds. Due July 1, 1921	July 2, 1907 \$70,000.00 Oct. 4, 1909 \$30,000.00	Jan. 1 & July 1	96,163.73	1,000.00	4,000.00	4,000.00	1,000.00	4,000.00	1,000.00	4,000.00	1,000.00	4,000.00	1,000.00
20,000.00	Central R. R. Co. of New Jersey General Mtge. 5% Bonds. Due July 1, 1987	Aug. 7, 1907	Jan. 1 & July 1	24,209.92	250.00	1,000.00	1,000.00	250.00	1,000.00	250.00	1,000.00	250.00	1,000.00	250.00
100,000.00	Union Pacific R. R. Co. 20 year 4% Convertible Gold Bonds. Due July 1, 1927	Oct. 11, 1907 \$35,000.00 Feb. 7, 1908 \$38,000.00 June 11, 1908 \$7,000.00	Jan. 1 & July 1	89,127.18	1,000.00	4,000.00	4,000.00	1,000.00	4,000.00	1,000.00	4,000.00	1,000.00	4,000.00	1,000.00
55,000.00	Chicago, Indiana & Southern R. R. Co. Consolidated Mtge. 4% Fifty year Gold Bonds. Due January 1, 1956	July 10, 1908	Jan. 1 & July 1	50,365.33	550.00	2,200.00	2,200.00	550.00	2,200.00	550.00	2,200.00	550.00	2,200.00	550.00
26,000.00	Atchison, Topeka & Santa Fe Ry. Co. Transcontinental Short Line First Mtge. 4% Fifty year Gold Bonds. Due July 1, 1958	Sept. 3, 1908	Jan. 1 & July 1	24,627.50	260.00	1,040.00	1,040.00	260.00	1,040.00	260.00	1,040.00	260.00	1,040.00	260.00
36,000.00	Union Pacific R. R. Co. First Lien and Refunding Mtge. 4% Bonds. Due Mar. 1, 2008	Nov. 9, 1908	Mar. 1 & Sept. 1	34,740.07	120.00	1,440.00	1,440.00	120.00	1,440.00	120.00	1,440.00	120.00	1,440.00	120.00
50,000.00	Chesapeake & Ohio Ry. Co. General Funding and Improvement Mtge. 5% Bonds. Due January 1, 1929	Mar. 12, 1909	Jan. 1 & July 1	50,716.30	625.00	2,500.00	2,500.00	625.00	2,500.00	625.00	2,500.00	625.00	2,500.00	625.00
25,000.00	Atchison, Topeka & Santa Fe Ry. Co. Gen. Mtge. 4% Bonds. Due October 1, 1995	May 17, 1909	Apr. 1 & Oct. 1	25,270.58	500.00	1,000.00	1,000.00	500.00	1,000.00	500.00	1,000.00	500.00	1,000.00	500.00
75,000.00	Chicago, Milwaukee & St. Paul Ry. Co. 25 year 4% Gold Bonds. Due July 1, 1934	Feb. 3, 1910	Jan. 1 & July 1	70,738.05	750.00	3,000.00	3,000.00	750.00	3,000.00	750.00	3,000.00	750.00	3,000.00	750.00
55,000.00	Baltimore & Ohio (Pittsburg, Lake Erie & West Virginia System) R. R. Co. Refunding 4% Gold Bonds. Due November 1, 1941	Apr. 20, 1910	May 1 & Nov. 1	50,375.40	916.67	2,900.00	2,900.00	916.67	2,900.00	916.67	2,900.00	916.67	2,900.00	916.67
\$13,972,000.00	<i>Total</i>			\$13,926,202.55	\$190,205.02	\$672,413.33	\$639,080.00	\$13,926,202.55	\$672,413.33	\$190,205.02	\$639,080.00	\$13,926,202.55	\$672,413.33	\$190,205.02

¹ Interest accrues to the Foundation from July 1, 1911.

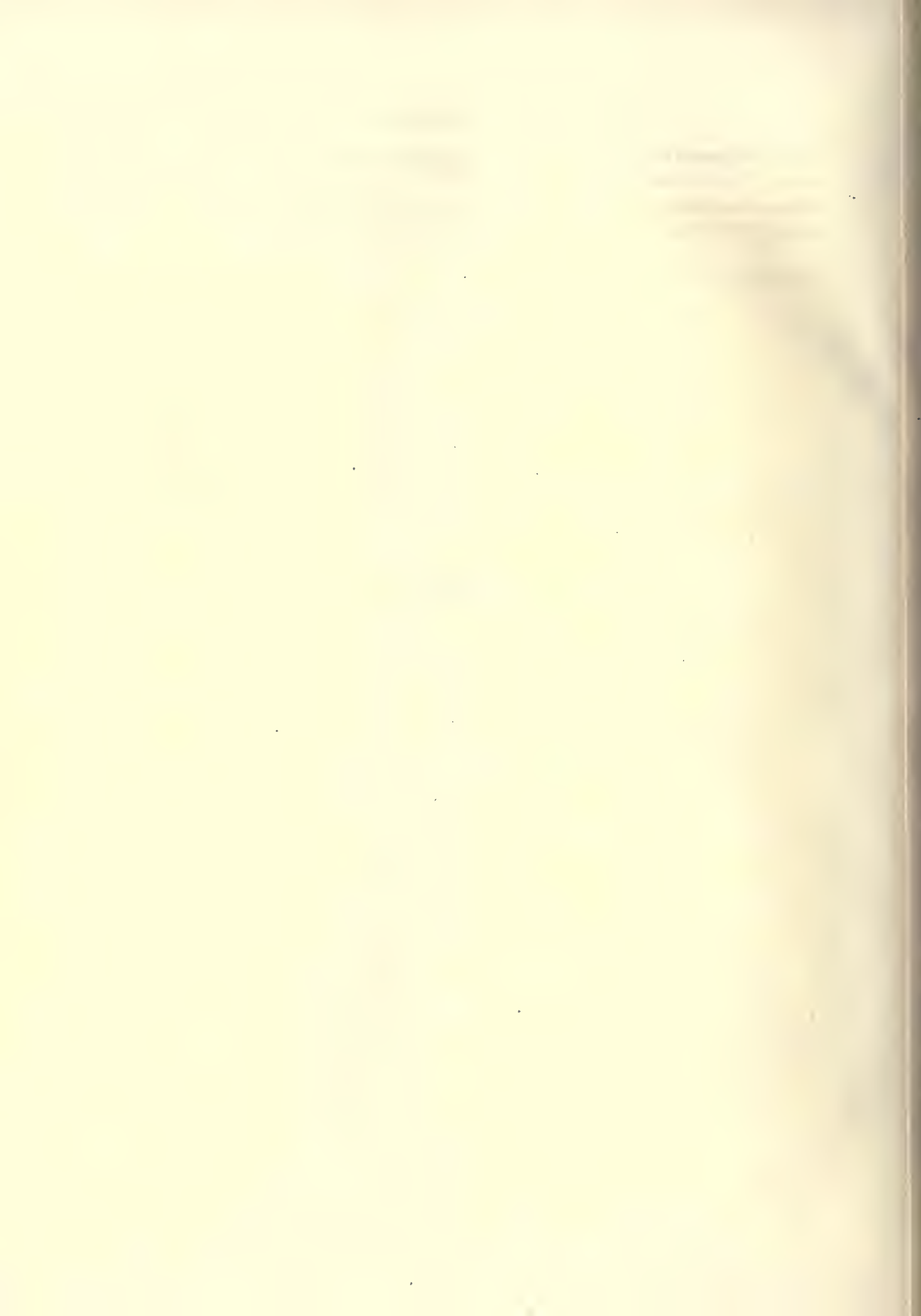
² Interest accrues to the Foundation from May 1, 1912.

REPORT OF THE TREASURER

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

- A**Accepted institutions of Carnegie Foundation.
 Allowances granted, 8.
 Annuity data, 10-15, 87-89, 92.
 History of list, 80.
 List of, 6, 7.
 No additions, 5.
 Pensions granted, 9.
 Rules for allowances and pensions in, 4, 22.
 Total paid to, in year, 3.
- Actuarial study for Carnegie Foundation, 5.
- ADELPHI COLLEGE, 87.
- Administrative service under rules, 4.
 Defined, 5.
- Admission to advanced standing, 109-122.
 Advanced high school work, 116, 117.
 "Dropped" students, 118, 119.
 Experience in teaching, 116.
 Normal school work accepted, 114, 115.
 Professional work accepted, 113, 114.
- Advanced standing, admission to, 109-122 (*see above*).
- Advertising in education, 133-143.
- Age.
 Average on retirement, 14.
 Table for teachers in accepted institutions, 93.
- Agricultural education, 97, 98, 104.
- ALABAMA, UNIVERSITY OF, 87, 97, 171.
- ALBANY MEDICAL SCHOOL, 124, 125, 127.
- ALFRED UNIVERSITY, 87.
 State aid, 152.
- ALLEGHENY COLLEGE, 87.
- Alumni associations, 137.
- AMERICAN BAR ASSOCIATION, 156.
- AMERICAN (BARNES) MEDICAL COLLEGE, St. Louis, 123.
- AMERICAN BOOK COMPANY, 145.
- AMERICAN EXPRESS COMPANY, pensions of, 47.
- AMERICAN MEDICAL ASSOCIATION, 126, 127, 129.
- AMERICAN SUGAR REFINING COMPANY, pensions of, 47.
- AMERICAN TELEPHONE AND TELEGRAPH COMPANY, pensions of, 45-47.
- AMHERST COLLEGE, 6.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 104.
- ANTIOCH COLLEGE, 87, 168.
- Appelmann, Anton, Prussian exchange teacher, 16.
- ARMOUR AND COMPANY, pensions of, 47, 48.
- ASSOCIATION OF AMERICAN MEDICAL COLLEGES, 128, 129.
- ASSOCIATION OF AMERICAN UNIVERSITIES, 109, 120, 139, 156.
- ASSOCIATION OF THE COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES, 102.
- ASSOCIATION OF STATE UNIVERSITIES, 139.
- ASSOCIATION OF WOMEN GRADUATE STUDENTS, 139.
- ATCHISON, TOPEKA AND SANTA FE RAILROAD, pensions of, 44, 64.
- Atlanta technological high school, 16.
- ATLANTA UNIVERSITY, 87, 168.
 Pensions granted, 9.
- ATLANTIC COAST LINE RAILROAD, pensions of, 44.
- B**BALIEL COLLEGE, Oxford, 26.
- BALTIMORE AND OHIO RAILROAD, pensions of, 44.
- BANGOR THEOLOGICAL SEMINARY, 167.
- Bar, admission to the, 102.
- Bates, Edward, Attorney-General, 75.
- BATES COLLEGE, 6.
 Cost of allowance system, 89.
- BEAVER COLLEGE, 87.
- Beeson, Marvin F., Prussian exchange teacher, 16.
- Bell, Hill M., President, Drake University, iii.
- BELOIT COLLEGE, 6.
 Cost of allowance system, 88.
 Entrance requirements, 105.
- BENNETT MEDICAL COLLEGE, Chicago, 123.
- Berea College Case, 161.
- BERLIN, UNIVERSITY OF, 155, 174.
- BETHANY COLLEGE, 87, 171.
- "BIG FOUR" RAILROAD, pensions of, 64.
- BISHOP SPENCER COLLEGE, 87.
- BOSTON COLLEGE OF PHYSICIANS AND SURGEONS, 123.
- BOSTON ELEVATED RAILWAY COMPANY, pensions of, 44.
- BOSTON HEADMASTERS' ASSOCIATION, 108.
- Boston high schools.
 Prussian exchange teacher, 16, 17.
- Boston teachers' pension fund, 41, 42.
- Bowditch, Mrs. Henry P., pension granted, 9.
- BOWDOIN COLLEGE, 5, 167.
 Entrance requirements, 104.
 Medical school, 124, 125, 127.
- Bovey, Henry T., deceased, 167.
- Bovey, Mrs. Henry T., pension granted, 9.
- Boyd, Daniel R., President, University of New Mexico, 145.
- Brastow, Lewis, 6.
 Deceased, 167.
- BRENAU COLLEGE, 140.
- Briggs, Edward M., Prussian exchange teacher, 16.
- BROOKLYN RAPID TRANSIT COMPANY, pensions of, 44.

- Brooks, Stratton D., President, State University of Oklahoma, 145.
- Brown, Herbert D., actuary, 75.
- BROWN UNIVERSITY, 87.
 Advanced standing in, 112, 113, 116, 117, 119.
 Pension system, 24.
- Bryan, Paul E., Prussian exchange teacher, 16.
- Bryan, William L., President, Indiana University, iii.
- BYRN MAWR COLLEGE, 139.
- BUCHTEL COLLEGE, 87.
- BUFFALO, ROCHESTER AND PITTSBURGH RAILROAD, pensions of, 44, 64.
- BUFFALO, UNIVERSITY OF, medical school, 127.
- Bulletins of the Carnegie Foundation, 20-22, 97, 98.
- BUREAU OF EDUCATION, UNITED STATES, 109.
- Burgess, John W., retired, 8.
- Burrill, Thomas J., retired, 9.
- Butler, Nicholas Murray, President, Columbia University, iii.
 Temporary chairman, executive committee, 5.
- BUTLER COLLEGE, 87.
- By-laws of Carnegie Foundation, 3.
- California, proposed state teachers' pension system, 33, 34.
- CALIFORNIA, UNIVERSITY OF, 6.
 Advanced standing in, 112, 114, 115, 118.
 Cost of allowance system, 89.
 Entrance requirements, 105.
 Former pension system, 24.
 Medical school, 123.
- CAMBRIDGE, UNIVERSITY OF, 167.
- CANADIAN PACIFIC RAILROAD, pensions of, 44, 64.
- CARLETON COLLEGE, 6.
 Cost of allowance system, 88.
- Carnegie, Andrew.
 Aided pension fund of United States Steel Corporation, 47.
 Increases endowment of Carnegie Foundation, 3.
- Carnegie, T. Morrison, Trustee, Carnegie Foundation, iii.
- CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING, THE.
 Accepted institutions, 6, 7.
 By-laws, 3.
 Deaths of beneficiaries, 12, 13.
 Educational function, 94-98.
 Endowment, 3.
 Executive committee, iii, 4, 5.
 Expenses, 3, 14, 15, 87.
 Fiscal year, 3, 10.
 Geographical distribution, 13.
- Income, 3.
 Officers, iii.
 Pension system, 78-94.
 Pensions, 3, 9, 12, 14, 15, 87.
 Publications, 19-22.
 Retiring allowances, 3, 8-15, 87-89, 92.
 Rules, 4, 5, 22, 69, 78, 82, 83.
 Trustees, iii, 4.
- CARNEGIE INSTITUTION OF WASHINGTON, 90.
- "CARNEGIE UNIVERSITY," Wilmington, Delaware, 155-157.
- CASE SCHOOL OF APPLIED SCIENCE, 6.
 Catalogues, College, 97, 135.
- CATHOLIC UNIVERSITY OF AMERICA, 135, 162.
- CENTRAL COLLEGE (Missouri), 140.
- CENTRAL UNIVERSITY OF KENTUCKY, 6.
 Abolished clinical medical work, 127.
 Cost of allowance system, 89.
- Chandler, Charles H., deceased, 168.
- Chandler, Francis W., retired, 8.
- Chandler professor, Dartmouth College, 8.
- Chase, Thomas N., deceased, 168.
- Chase, Mrs. Thomas N., pension granted, 9.
- CHATTANOOGA UNIVERSITY, abolished clinical medical work, 127.
- Chicago.
 Public school employees' pension fund, 38.
 Teachers' pension fund, 37, 38.
- CHICAGO AND NORTHWESTERN RAILROAD SYSTEM, pensions of, 44.
- CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RAILROAD, pensions of, 44.
- CHICAGO, UNIVERSITY OF, 17.
 Advanced standing in, 111, 114, 115, 117-119.
 Financial report, 132.
 Medical school, 123.
 Pension system, 24, 25.
- CINCINNATI, UNIVERSITY OF, 6.
 Cost of allowance system, 89.
- City pension systems, 39-44.
- Civil war pensions, United States, 75-77.
- CLARK UNIVERSITY, 6, 17.
 Cost of allowance system, 88.
 Entrance requirements, 105.
- CLARKSON MEMORIAL SCHOOL OF TECHNOLOGY, THOMAS S., 6.
 Cost of allowance system, 88.
- CLEMSON AGRICULTURAL COLLEGE, 87.
- Cleveland, Grover, President of the United States.
 Vetoed pension legislation, 75-77.
- COE COLLEGE, 6.
 Cost of allowance system, 89.
- Coghlan, T. A., actuary, 50, 51.
- COLBY COLLEGE, 172.
- COLLEGE ENTRANCE EXAMINATION BOARD, 101, 106.

- College pension system, a, 65-70.
 Colorado, normal school history in, 149.
 COLORADO, UNIVERSITY OF, 87.
 COLORADO COLLEGE, 6.
 Cost of allowance system, 88.
 Entrance requirements, 105.
 COLUMBIA UNIVERSITY, 5, 6, 17.
 Advanced standing in, 110, 113, 114, 116, 117.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 104.
 Former pension system, 24.
 Medical school, 123.
 Pension system, Teachers College, 25.
 Conditioned students, 103.
 Congress of the United States.
 Bill for District of Columbia teachers' pensions, 34, 35.
 Military pensions, 75-77.
 CONJOINT BOARD OF ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.
 Visit of secretary to America, 127, 128.
 Contributory pensions, 59-63, 72.
 Cooke, Morris Llewellyn, 22.
 COOPER UNION, New York City, 87.
 CORNELL COLLEGE, Mt. Vernon, Iowa, 87.
 CORNELL UNIVERSITY, 4, 6, 170, 174.
 Advanced standing in, 111, 114, 116-118.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 105.
 Former pension system, 24.
 Medical school, 123, 126.
 Pensions granted, 9.
 State aid, 152.
 Corson, Hiram, 78.
 Cost of retiring allowances in accepted institutions, 88, 89.
 COTNER UNIVERSITY, 124.
 Craighead, Edwin B., President, University of Montana, iii.
 Crawford, William H., President, Allegheny College, iii.
 Cruse, Lee, Governor of Oklahoma, 145.
 CUMBERLAND UNIVERSITY, 172.
 Curtis, Mrs. Edward L., pension granted, 9.
- D**ALHOUSIE COLLEGE, 6.
 Cost of allowance system, 88.
 DARTMOUTH COLLEGE, 6, 168.
 Advanced standing in, 110, 112, 113, 116-118.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 104.
 State aid, 152.
- Deaths of beneficiaries, 9, 13, 15.
 DELAWARE, LACKAWANNA AND WESTERN RAILROAD, pensions of, 44, 64.
 Denny, George H., President, University of Alabama, iii.
 Dental education, 130.
 Dental training, 98.
 DENVER, UNIVERSITY OF.
 Abolished clinical medical work, 127.
 Advertising, 140.
 DE PAUW UNIVERSITY, 18.
 Detroit teachers' pension fund, 43.
 Dexter, Franklin B., retired, 8.
 DICKINSON COLLEGE, 6.
 Disability under rules, 4.
 Data, 10-12, 15.
 Discontinuances, 13, 15.
 District of Columbia.
 Laws governing educational charters, 158-163.
 Proposed teachers' pension system, 34.
 D'Ooge, Martin L., retired, 8.
 Doolittle, Charles L., retired, 8.
 DRAKE UNIVERSITY, 6.
 Cost of allowance system, 89.
 DRURY COLLEGE, 6.
 Cost of allowance system, 89.
 Dwight, Mrs. Thomas, pension granted, 9.
- E**aston, Morton W., retired, 8.
 ECLECTIC MEDICAL COLLEGE, New York City, 123.
 Eclectic medical schools, decrease, 127.
 Economy and Efficiency, Federal Commission on, 75.
 Eddy, Henry T., retired, 8.
 EDUCATION, BUREAU OF, 90, 132, 142.
 Educational function of the Carnegie Foundation, 94-98.
 Efficiency, Bulletin on Academic and Industrial, 22.
 ELIZABETH COLLEGE, 139.
 Elkin, Lewis, Philadelphia philanthropist, 42.
 ELMIRA COLLEGE, 87.
 Employees' fund, Chicago public school, 38.
 Endowment of Carnegie Foundation, 3.
 English, entrance requirements in, 107, 108.
 English civil service pension, 60, 62.
 Entrance requirements, 101-108.
 ETHNOLOGY, BUREAU OF, 90.
 Examination in entrance requirements, 105.
 Exchange of teachers with Prussia, 16-19, 22.
 Executive committee of Carnegie Foundation.
 Membership, iii, 4.
 Proceedings, 5.
 Resolution, 3.
 Expenses of Carnegie Foundation, 3.

- F**aculties, size in accepted institutions, 14.
 Fellowships, grant of, 137.
 Finance committee of Carnegie Foundation, 3.
 Financial data of Carnegie Foundation.
 Allowances in force, 11.
 Expenditures in allowances, 14, 15, 87.
 Fiscal year, 3, 10.
 Financial Forms, Bulletin on Standard, 21, 130, 133.
 Financial reporting, college, 130-133.
 Fiscal year of Carnegie Foundation, 3.
 Fischer, Ernest G., Prussian exchange teacher, 16.
FISK UNIVERSITY, 87.
 Fletcher, William I., retired, 8.
 Flexner, Abraham, Assistant Secretary, General Education Board, 22, 122.
FLORIDA, UNIVERSITY OF, 97, 147.
FORDHAM UNIVERSITY, 126, 127.
FRANKLIN COLLEGE, New Athens, Ohio, 87.
FRANKLIN COLLEGE OF INDIANA, 6.
 Allowances granted, 8.
 Cost of allowance system, 89.
 Franks, Robert A., Treasurer, Carnegie Foundation, iii.
 Frierson, Sarah A., deceased, 169.
FURMAN UNIVERSITY, 87, 171.
 Furst, Clyde, Secretary, Carnegie Foundation, iii.

Geographical distribution of beneficiaries, 13.
 Of Prussian exchange teachers, 17.
GEORGE WASHINGTON UNIVERSITY, 87, 162.
GEORGETOWN UNIVERSITY, 162.
GEORGIA, UNIVERSITY OF, 87, 169.
 Gillis, Norman R., deceased, 169.
 Gladstone, Viscount, 58.
GORHAM MANUFACTURING COMPANY, pensions of, 47.
GÖTTINGEN, UNIVERSITY OF, 174.
 Graduate schools, 97.
GRAND TRUNK RAILWAY SYSTEM, pensions of, 44.
 Greek as entrance subject, 105.
GRINNELL COLLEGE, 6.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 105.
GROVE CITY COLLEGE, 87.
 Gsell, Erwin, Prussian exchange teacher, 16.
 Guntermann, Karl, Prussian exchange teacher, 16.
 Gymnasia, Prussian, 16, 17.

Hadley, Arthur T., President, Yale University, iii.
 Member, executive committee, 4.
 Hall, Columbus H., retired, 8.
 Hallett, Frederick G., Secretary, London Conjoint Board.
 Visit to America, 127, 128.
HAMILTON COLLEGE, 6.
 Cost of allowance system, 88.
 Entrance requirements, 104.
HANOVER COLLEGE, 87.
 Harrison, Benjamin, President of the United States.
 Approved pension legislation, 76.
HARVARD UNIVERSITY, 6, 125, 155.
 Advanced standing in, 109, 113, 115, 117, 118, 120.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 104, 107, 108.
 Financial report, 132.
 Former pension system, 24.
 Medical school, 123, 127.
 Pensions granted, 9.
HAVERFORD COLLEGE, pension system of, 24.
 Haynes, Arthur E., retired, 8.
HEIDELBERG, UNIVERSITY OF, 174.
HERRING MEDICAL COLLEGE, 123.
 Hickman, Adam C., retired, 8.
HIGH EDUCATIONAL COLLEGE OF GLORY, 154.
HIGH SCHOOL TEACHERS' ASSOCIATION OF NEW YORK.
 Resolutions on entrance requirements, 108.
HILL SCHOOL, Prussian exchange teacher, 17.
HILLSDALE COLLEGE, 87.
HIRAM COLLEGE, 87.
HOBART COLLEGE, 6.
 Cost of allowance system, 88.
HOLDERNESS SCHOOL, Plymouth, New Hampshire, Prussian exchange teacher, 16.
 Holmes professor, Yale University, 9.
 Homeopathic medical schools, decrease in, 128.
HORACE MANN SCHOOL, Prussian exchange teacher, 16, 17.
HOWARD COLLEGE, Birmingham, Alabama, 16.
HOWARD UNIVERSITY, Washington, District of Columbia, 87.
 Hume, Thomas, 169.
 Humphreys, Alexander C., President, Stevens Institute of Technology, iii.
 Humphreys, Morton W., retired, 8.

Illinois, teachers' local pension funds, 37, 38.
ILLINOIS, UNIVERSITY OF, 87, 174.
 Abolished clinical medical work, 127.
 Advanced standing in, 114, 119.
 Allowances granted, 9.
ILLINOIS CENTRAL RAILROAD, pensions of, 44.
 Income of Carnegie Foundation, 3.
 Indiana, teachers' state pension bill, rejected, 35.

- INDIANA UNIVERSITY, 6.
 Advanced standing, 109, 112-114, 116-118.
 Cost of allowance system, 89.
 Pensions granted, 9.
- Individual allowances of Carnegie Foundation.
 Data, 10-12, 14, 15.
 Geographical distribution, 13.
 Granted, 9.
 Restriction, 5.
 Total paid in year, 3.
- Industrial pensions, 44-48, 64.
- Instructor, rules for allowances, 4.
- INTERNATIONAL HARVESTER COMPANY, pensions of, 25, 47.
- IOWA, EDUCATIONAL COMMISSION OF, policy of, 147.
- IOWA, normal school history in, 149.
- IOWA, STATE UNIVERSITY OF, 87.
- IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, 87, 170.
- Jackson, Charles L., retired, 8.
- James, William, 78.
- JEFFERSON MEDICAL COLLEGE, 87.
- JENNER MEDICAL COLLEGE, 123.
- Jewett, Frank F., retired, 8.
- JOHNS HOPKINS UNIVERSITY, 6.
 Advanced standing in, 111, 113, 116, 117, 119.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Medical school, 123, 127.
 State aid, 153.
- Johnson, Ben, Congressman from Kentucky, 34.
- Johnson, Otis C., deceased, 8, 170.
- Johnson, Mrs. Otis C., pension granted, 9.
- Johnston, Mrs. Harold W., pension granted, 9.
- Jones, George W., deceased, 170.
- Jones, Mrs. George W., pension granted, 9.
- Jones, Paul, Prussian exchange teacher, 18.
- Jordan, David Starr, President, Leland Stanford Junior University, iii.
- Kansas, local teachers' pension systems, 36.
- KANSAS, UNIVERSITY OF, 16, 87.
 Advanced standing in, 112, 118.
- Keidel, Heinrich, Prussian exchange teacher, 16.
- KENTUCKY, STATE UNIVERSITY OF, 90.
 Action of trustees, 145, 149.
- King, Henry C., President, Oberlin College, iii.
- KNOX COLLEGE, 6.
 Allowances granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 105. [16.
- Kopas, Wilhelm, Prussian exchange teacher,
- LAFAYETTE COLLEGE, 90.
- LAKE ERIE COLLEGE, 90.
- LAKE FOREST COLLEGE, 90. [103.
- Land-grant colleges, entrance requirements, Latin as entrance subject, 104, 105.
- Law schools, entrance requirements, 102.
- LAWRENCE COLLEGE, 6.
 Cost of allowance system, 88.
- Lee, Isaac A., Prussian exchange teacher, 16.
- Legal education, 97, 98.
- LEHIGH UNIVERSITY, 6.
 Advanced standing in, 111, 113, 115, 117.
 Cost of allowance system, 88.
- LELAND STANFORD JUNIOR UNIVERSITY, 6.
 Advanced standing in, 113, 117.
 Cost of allowance system, 88.
 Entrance requirements, 105.
 Medical school, 123.
- LEMOYNE NORMAL INSTITUTE, 90.
- Leonard, Sterling A., Prussian exchange teacher, 16.
- LEXINGTON COLLEGE, 140.
- LOMBARD COLLEGE, 90.
- Loos, Charles L., deceased, 171.
- Louisville Teachers' Pension Fund, 36.
- Lowell, A. Lawrence, President, Harvard University, iii.
- LOYOLA UNIVERSITY, Medical School, 124.
- McClelland, Thomas, President, Knox College, iii.
- McCormick, Samuel B., Chancellor, University of Pittsburgh, iii.
- MCGILL UNIVERSITY, 4, 6, 125, 139, 167, 169.
 Advanced standing in, 111, 112, 115, 118.
 Cost of allowance system, 88.
 Former pension system, 24.
 Pensions granted, 9.
- MACKENZIE SCHOOL, 17.
- McKinley, William, President of the United States.
 Approved pension legislation, 76.
- McLean professor, Harvard University, 8.
- McMinnville College, 136, 140.
- Macvane, Silas M., retired, 8.
- Macy, Jesse, retired, 8.
- MAINE, MEDICAL SCHOOL OF, 124, 125, 127.
- Maine, proposed state teachers' pension system, 33.
- MAINE, UNIVERSITY OF, 90.
- Malden (Massachusetts) high school, 16.
- Malone, Kemp, Prussian exchange teacher, 16.
- Mann, Horace, 150.
- MARIETTA COLLEGE, 6.
 Cost of allowance system, 88.
- MARION MILITARY INSTITUTE, 90.
 Pensions granted, 9.

- MARQUETTE UNIVERSITY**, medical school, 124.
- Maryland.**
State aid to private institutions, 153.
Teachers' state pension system, 26.
- MARYLAND MEDICAL COLLEGE**, 123.
- Massachusetts.**
State aid to private institutions, 152, 153.
Study of teachers' pension systems, 35.
- MASSACHUSETTS AGRICULTURAL COLLEGE**, 90.
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, 6, 17.
Allowances granted, 8.
Cost of allowance system, 88.
State aid, 152, 153.
- Medical education.**
Publications by Foundation, 20-22, 96.
Progress in, 122-130.
- Medical schools.**
Decrease in United States and Canada, 128.
Entrance requirements, 101.
- Medicine**, license to practice, 102.
- MERIDIAN COLLEGE**, 16.
- MIAMI UNIVERSITY**, 90.
- Michael, Otto**, Prussian exchange teacher, 16.
- Michigan**, normal school history in, 149.
- MICHIGAN, UNIVERSITY OF**, 6, 170, 174.
Advanced standing in, 109, 110, 112-114, 116-118.
Allowances granted, 8.
Cost of allowance system, 89.
Entrance requirements, 106.
Pensions granted, 9.
- MICHIGAN AGRICULTURAL COLLEGE**, 16.
- MIDDLEBURY COLLEGE**, 6.
Cost of allowance system, 88.
State aid, 152.
- Military pensions**, United States, 75-77.
- MILLS COLLEGE**, 90.
- MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RAILROAD**, pensions of, 44.
- Minnesota**, local teachers' pension systems, 36.
- MINNESOTA, UNIVERSITY OF**, 6.
Advanced standing in, 109, 112, 113, 115, 116, 118.
Allowances granted, 8.
Catalogue, 135.
Cost of allowance system, 89.
Entrance requirements, 105.
Pensions granted, 9.
- MISSISSIPPI, UNIVERSITY OF**, 90.
- MISSOURI, UNIVERSITY OF**, 6.
Abolished clinical medical work, 127.
Advanced standing in, 109, 113, 114, 116-118.
Cost of allowance system, 89.
- Modern language teaching in Prussia**, 19.
- MONTANA, BOARD OF EDUCATION OF**, 148, 149.
- MONTANA, UNIVERSITY OF**, 90.
- Moran, Isaac K.**, retired, 8.
- MORRIS AND COMPANY**, pensions of, 47, 48.
- Mortality experience**, 91.
- MOUNT HOLYOKE COLLEGE**, 6, 139.
Allowances granted, 8.
Cost of allowance system, 88.
- Müller, Max**, Prussian exchange teacher, 16.
- Murfee, James T.**, deceased, 171.
- Murfee, Mrs. James T.**, pension granted, 9.
- MUSKINGUM COLLEGE**, advertising, 141.
- NASHVILLE, UNIVERSITY OF**, 90, 172, 173.
Advanced standing in, 112.
Pensions granted, 9.
- NATIONAL ASSOCIATION OF SCHOOL ACCOUNTANTS**, 132.
- NATIONAL ASSOCIATION OF STATE UNIVERSITIES**, 120, 155.
- NATIONAL EDUCATION ASSOCIATION**, 132.
- NEBRASKA, UNIVERSITY OF**, 90.
Advanced standing in, 110, 114, 115, 117, 118.
- NEW BRUNSWICK, UNIVERSITY OF**, 90.
- NEWFOUNDLAND, COUNCIL OF HIGHER EDUCATION OF**, 90.
- New Hampshire.**
Constitutional prohibition against teachers' pensions, 36.
State aid to colleges, 152.
- NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND MECHANIC ARTS**, 152.
- New Jersey**, teachers' state pension system, 24, 27-30.
- New South Wales**, pension system of, 23, 48-58, 74.
- New York, Education Department of**, advance in medical requirements, 129.
- New York, state of**, teachers' pension system, 26, 30-33.
State aid to private institutions, 152.
- NEW YORK CENTRAL LINES**, pensions of, 44, 64.
- New York City teachers' pension fund**, 39-41.
- NEW YORK UNIVERSITY**, 6.
Advanced standing in, 111, 113, 114, 116, 118.
Cost of allowance system, 88.
- Normal school work accepted for advanced academic standing**, 114, 115.
- Normal schools changing into arts colleges**, 149-152.
- Norman, James W.**, Prussian exchange teacher, 16.
- NORTH CAROLINA COLLEGE OF AGRICULTURE AND MECHANIC ARTS**, 90.
- NORTH CAROLINA, UNIVERSITY OF**, 90, 169.
Abolished clinical medical work, 127.
- NORTH DAKOTA, UNIVERSITY OF**, 90.
- NORTHWESTERN UNIVERSITY.**
Advanced standing in, 109, 113-117, 119, 123.
Financial report, 132.

NORWICH UNIVERSITY, state aid, 152.
Nurses, training of, 98.

OBERLIN COLLEGE, 6, 170.

Allowances granted, 8.
Cost of allowance system, 88.
Entrance requirements, 104.

Officers of the Carnegie Foundation, iii.

Ohio, teachers' local pension funds, 37.

OHIO STATE UNIVERSITY, 90.

Advanced standing in, 113, 114, 117.
Financial reports, 133.

OHIO UNIVERSITY, 90.

OKLAHOMA, STATE UNIVERSITY OF, 97.

Government of, 145-147, 149.

OLD DOMINION STEAMSHIP COMPANY, pensions of, 44.

OLIVET COLLEGE, 90.

ONTARIO LADIES' COLLEGE, 140.

OREGON, UNIVERSITY OF, 90.

OREGON AGRICULTURAL COLLEGE, 90.

ORIENTAL UNIVERSITY, 154.

Owen, Alfred, deceased, 172.

OXFORD, UNIVERSITY OF, 26, 155.

OXFORD COLLEGE, 140.

PACIFIC UNIVERSITY, 90, 136.

PARIS, UNIVERSITY OF, 174.

PARK COLLEGE, 90.

Pattee, Mrs. William S., pension granted, 9.

Patton, John W., retired, 8.

PEABODY EDUCATION FUND, 173.

Pennsylvania.

Constitutional prohibition of teachers' pensions, 36.

State aid to private institutions, 152.

PENNSYLVANIA, UNIVERSITY OF, 7.

Advanced standing in, 111, 114, 116-118.

Allowances granted, 8.

Cost of allowance system, 88.

Pensions granted, 9.

State aid, 153.

PENNSYLVANIA RAILROAD SYSTEM, pensions of, 44, 64.

PENNSYLVANIA STATE COLLEGE, 17, 90.

Pension systems, 23-94.

A college pension system, 65-70.

Brown University, 24.

Carnegie Foundation system, 78-94.

City teachers' pension systems.

Boston, 41, 42.

Detroit, 43.

New York, 39-41.

Philadelphia, 42, 43.

San Francisco, 44.

Columbia University, 25.

Contributory pensions, 59-63, 72.

Former college systems, 24.

Great Britain school teachers, 92.

Haverford College, 24.

Industrial pensions, 44-48.

Local teachers' pension systems.

Illinois, 37, 38.

Kansas, 36.

Louisville, 36.

Minnesota, 36.

Ohio, 37.

Utah, 36.

New Jersey teachers, 24.

New South Wales, 23, 48-58, 74.

Proposed teachers' state pension systems, 33-35.

Public school employees' pension funds, 38.

Porto Rico, 39.

Public school teachers, state systems.

Maryland, 26.

New Jersey, 27-30.

New York, 30-33.

Rhode Island, 27.

Virginia, 26, 73.

Wisconsin, 27.

South Africa, 58, 59.

[64.

Subsistence and stipendiary pensions, 63.

Suggested for public school teachers, 70-77.

Stipendiary pensions, 64, 78, 79.

Teachers' pension fund bills rejected, 35, 36.

Voluntary systems, 26.

United States civil service pensions, 75.

United States military pensions, 75-77.

University of Chicago, 24, 25.

University of Wooster, 25.

Pensions of Carnegie Foundation.

Data, 10-12, 14, 15, 87.

Granted, 9.

Rules, 4.

Total amount paid in year, 3.

Peterson, William, Principal, McGill University, iii, 4.

Quotation, 139.

Pharmacy, education for, 130.

PHILADELPHIA AND READING RAILROAD, pensions of, 44, 64.

PHILADELPHIA RAPID TRANSIT COMPANY, pensions of, 45, 64.

Philadelphia teachers' pension fund, 42, 43.

PHILLIPS ACADEMY, Andover, Massachusetts, Prussian exchange teacher, 16, 17.

PHILLIPS EXETER ACADEMY, Prussian exchange teacher, 16, 17.

Physical director of a college, when eligible, 5.

Physio-medical schools, disappearance of, 128.

PITTSBURGH, UNIVERSITY OF, 7.

Allowances granted, 8.

Cost of allowance system, 88.

State aid, 153.

- Plantz, Samuel, President, Lawrence College, iii.
- Politics and Education, 143-149.
- POLYTECHNIC INSTITUTE OF BROOKLYN, 7.
Cost of allowance system, 88.
- Porter, James D., deceased, 172.
- Porter, Mrs. James D., pension granted, 9.
- Porto Rico, teachers' pension fund, 39.
- President, Carnegie Foundation, iii. (*See* Pritchett, Henry S.)
- Presidential service under rules, 4.
- Presidents of the United States, action on military pensions, 75-77.
- PRINCE EDWARD ISLAND, DEPARTMENT OF EDUCATION, 90.
- PRINCETON THEOLOGICAL SEMINARY, 173.
- PRINCETON UNIVERSITY, 7, 173.
Cost of allowance system, 88.
Entrance requirements, 104.
Financial reports, 132.
Pensions granted, 9.
- Pritchett, Henry S., President, Carnegie Foundation, iii.
Absence, 3.
- PRITCHETT COLLEGE, 90.
- Professional schools, entrance requirements, 102.
- Professional work counted toward advanced academic standing, 113, 114.
- Professor, rules for allowances, 4.
- Prussia, exchange of teachers with, 16-19, 22.
- Publications of Carnegie Foundation, 19-22.
- Publicity bureau, 137.
- PURDUE UNIVERSITY, 7.
Advanced standing in, 112, 117, 119.
Cost of allowance system, 89.
- QUEEN'S UNIVERSITY, 167.
- RADCLIFFE COLLEGE, 7, 93.
Cost of allowance system, 88.
- Randolph, Louise F., retired, 8.
- RANDOLPH-MACON WOMAN'S COLLEGE, 90.
- Reasons for teachers' pensions, 71.
- REED COLLEGE, publications, 136.
- Regents, composition of boards of, 144-149.
- Remsen, Ira, President, Johns Hopkins University, iii.
- Renouf, Edward, retired, 8.
- Reports of the Carnegie Foundation, 20, 21.
- Research, 85.
Rules for allowances for, 5.
- Retiring allowances.
Change in rules, 4.
Cost of accepted institutions, 88, 89.
Data, 10-15, 87, 92.
Geographical distribution, 13.
Granted, 8, 9.
- Interpretation, 5.
Rules for granting, 4, 5, 22.
Total amount paid in year, 3.
- Rhode Island, teachers' state pension system, 26, 27.
- Richards, Eugene L., deceased, 173.
- RICHMOND COLLEGE, 170.
- RIPON COLLEGE, 7.
Cost of allowance system, 88.
- ROCHESTER, UNIVERSITY OF, 7.
Cost of allowance system, 88.
- ROCK ISLAND LINES, pensions of, 44.
- ROCKFORD COLLEGE, 140.
- ROGER WILLIAMS UNIVERSITY, 90, 172.
- ROLLINS COLLEGE, 90.
- Roosevelt, Theodore, President of the United States.
Approved pension legislation, 76.
- ROSE POLYTECHNIC INSTITUTE, 7.
Cost of allowance system, 89.
- ROXBURY TUTORING SCHOOL, New Haven, Connecticut, 16.
- Ruggles professor, Columbia University, 8.
- Rules of Carnegie Foundation, 78, 82, 83.
Change, 4, 69.
Publication, 22.
Summary, 4, 5.
- ST. JOHN'S COLLEGE, Annapolis, Maryland, state aid, 153.
- ST. LAWRENCE UNIVERSITY, state aid, 152.
- ST. STEPHEN'S COLLEGE, 137.
- Salaries, Bulletin on College, 21.
- SALEM COLLEGE (North Carolina), 140.
- SAN ANTONIO AND ARANSAS PASS RAILROAD, pensions of, 44.
- San Francisco teachers' pension fund, 44.
- Scholarships, grant of, 137.
- SCHOOL OF MINING, Kingston, Ontario, 90.
- Schurman, Jacob Gould, President, Cornell University, iii.
Member, executive committee, 4.
- Schwamb, Peter, retired, 8.
- SCOTIA SEMINARY, 139.
- Searle, Arthur, retired, 8.
- Secretary, Carnegie Foundation, iii.
- Secretary to president of college, not eligible, 5.
- Service pensions.
Data, 15.
History, 82, 83.
- Sham universities, 154-163.
- Shattuck, S. W., retired, 9.
- Sherman, Frank A., retired, 8.
- SHORTER COLLEGE (Georgia), 140.
- Slocum, William F., President, Colorado College, iii.
- SMITH COLLEGE, 7, 139.
Advanced standing in, 111.

- Allowances granted, 8.
 Cost of allowance system, 89.
 Entrance requirements, 104.
SNOW, Marshall S., retired, 8.
 South, rise of entrance requirements in, 101.
 South Africa, pension system of Union of, 58, 59.
SOUTH CAROLINA, UNIVERSITY OF, 90.
SOUTH CAROLINA MILITARY ACADEMY, 90.
SOUTHERN CALIFORNIA, UNIVERSITY OF, medical school, 124.
SOUTHERN EDUCATION BOARD, 90.
SOUTHERN PACIFIC RAILROAD, pensions of, 44.
SOUTHERN STATES, ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE, 102.
Spangler, Mrs. Henry W., pension granted, 9.
 Special students, 103.
SPRING HILL COLLEGE, 139.
 State aid to private institutions, 152-154.
 State universities, 105.
Steckel, Thomas E., Prussian exchange teacher, 16.
Stephens, Winston B., Prussian exchange teacher, 16.
STEVENS INSTITUTE OF TECHNOLOGY, 7, 174.
 Pensions granted, 9.
 Cost of allowance system, 89.
 Stipendiary pensions, 64, 78, 79.
Stone, Ormond, retired, 8.
 Subsistence pensions, 63, 64.
SUSQUEHANNA UNIVERSITY, 90.
SWATHMORE COLLEGE, 7.
 Cost of allowance system, 89.
SWEETBRIAR COLLEGE, 139.
SYRACUSE UNIVERSITY, state aid, 152.
- TABOR COLLEGE**, 90.
Taft, William H., President of the United States.
 Approved pension legislation, 77.
 Recommends civil service pensions, 75.
TALLADEGA COLLEGE, 90.
Taylor, James M., President, Vassar College, iii.
Teachers.
 Exchange with Prussia, 16-19, 22.
 Number in accepted institutions, 14.
 Preparation in Prussia, 19.
 Training of, 97.
TEACHERS COLLEGE, Columbia University.
 Advanced standing in, 116.
 Pension system, 25.
 Technical schools, entrance requirements, 103.
Tece, Richard, actuary, 49, 50.
TENNESSEE, UNIVERSITY OF, 90.
 Medical school, 124, 125.
TEXAS, UNIVERSITY OF, advanced standing in, 109, 113, 114.
TEXAS CHRISTIAN UNIVERSITY, 124.
- Thwing, Charles F.**, President, Western Reserve University, iii.
TOME SCHOOL FOR BOYS, Prussian exchange teacher, 16.
TORONTO, UNIVERSITY OF, 7.
 Cost of allowance system, 89.
 Financial report, 132.
 Former pension system, 24.
TRANSYLVANIA UNIVERSITY, 90, 171.
Treasurer, Carnegie Foundation, iii.
TRINITY COLLEGE, Hartford, Connecticut, 7.
 Cost of allowance system, 89.
 Entrance requirements, 104.
Trivett, John B., actuary, 50-52. [149.]
Trustees, composition of college boards of, 144-
Trustees of the Carnegie Foundation.
 Annual meeting, 4.
 Names, iii.
TUFTS COLLEGE, 7.
 Advanced standing in, 112.
 Cost of allowance system, 89.
TULANE UNIVERSITY OF LOUISIANA, 7.
 Advanced standing in, 110, 113, 114, 118.
 Cost of allowance system, 89.
Tyler, Henry M., retired, 8.
- UNION PACIFIC RAILROAD**, pensions of, 44, 64.
UNION UNIVERSITY, 7.
 Cost of allowance system, 89.
 Medical school, 124, 125, 127.
 United States civil service pensions, 75.
 United States military pensions, 75-77.
UNITED STATES STEEL CORPORATION.
 Bonds owned by Carnegie Foundation, 3.
 Pension system of, 47.
 Units, entrance requirement, 101.
UNIVERSITY COLLEGE, Oxford, 119.
UNIVERSITY OF PUGET SOUND, 136.
 Utah, teachers' local pension funds, 36.
- VALPARAISO UNIVERSITY**, 140.
Vanderlip, Frank A., Trustee, Carnegie Foundation, iii.
Van Dyke, Henry N., deceased, 173.
Van Dyke, Mrs. Henry N., pension granted, 9.
Van Hise, Charles R., President, University of Wisconsin, iii.
VASSAR COLLEGE, 7, 139.
 Advanced standing in, 109, 110, 112, 113, 116, 117, 119.
 Allowance granted, 8.
 Cost of allowance system, 88.
 Entrance requirements, 104.
 Vermont, state aid to private institutions, 152.
VERMONT, UNIVERSITY OF, 7.
 Cost of allowance system, 89.
 Medical school, 127.
 State aid, 152.

- Virginia, state aid to private institutions, 153.
 Virginia, teachers' state pension system, 26, 73.
 VIRGINIA, UNIVERSITY OF, 7, 169.
 Advanced standing in, 101.
 Allowances granted, 8.
 Catalogue, 135.
 Cost of allowance system, 89.
 Entrance standard, 101.
 VIRGINIA MILITARY INSTITUTE, 90, 171.
 VIRGINIA POLYTECHNIC INSTITUTE, 90.
 Vocational studies, 104.
 Voluntary pension systems, 26.
- WARASH COLLEGE, 7.
 Cost of allowance system, 89.
 Wadsworth, Marsham E., retired, 8.
 WAKE FOREST COLLEGE, 170.
 WASHBURN COLLEGE, abolished clinical medical work, 127.
 WASHINGTON, UNIVERSITY OF, advanced standing in, 109, 112, 117.
 WASHINGTON AND JEFFERSON COLLEGE, 7.
 Cost of allowance system, 89.
 WASHINGTON AND LEE UNIVERSITY, 90.
 WASHINGTON COLLEGE, Chestertown, Maryland, state aid, 153.
 WASHINGTON UNIVERSITY, 7.
 Allowance granted, 8.
 Cost of allowance system, 89.
 Medical school, 123.
 Webb, John B., deceased, 174.
 Webb, Mrs. John B., pension granted, 9.
 WELLESLEY COLLEGE, 7, 139.
 Cost of allowance system, 89.
 Entrance requirements, 104.
 WELLS COLLEGE, 7.
 Cost of allowance system, 89.
 Resignation of president, 146.
 WELLS FARGO AND COMPANY, pensions of, 47.
 WESLEYAN UNIVERSITY, 7.
 Cost of allowance system, 89.
 Entrance requirements, 104.
 WESTERN COLLEGE FOR WOMEN, Oxford, Ohio, 90.
 WESTERN ELECTRIC COMPANY, pensions of, 45.
 Western institutions, entrance requirements, 105.
- WESTERN RESERVE UNIVERSITY, 7.
 Advanced standing in, 113, 114.
 Cost of allowance system, 89.
 Medical school, 127.
 WESTERN UNION TELEGRAPH COMPANY, pensions of, 45.
 WEST VIRGINIA UNIVERSITY, 90.
 WESTINGHOUSE AIR BRAKE COMPANY, pensions of, 47.
 Whitney, Mary W., retired, 8.
 WILLAMETTE UNIVERSITY, 124, 136.
 Willard, Thomas R., retired, 8.
 Williams, Henry S., retired, 8.
 WILLIAM AND MARY COLLEGE, 90.
 WILLIAMS COLLEGE, 7.
 Cost of allowance system, 89.
 Entrance requirements, 104.
- WISCONSIN.
 Normal school legislation, 150, 151.
 Teachers' state pension system, 26, 27.
 WISCONSIN, UNIVERSITY OF, 7.
 Advanced standing in, 109-115, 117, 119.
 Cost of allowance system, 89.
 Financial report, 133.
 Prussian exchange teacher, 16, 17. [16.
 WISCONSIN STATE NORMAL SCHOOL, Milwaukee, WOFFORD COLLEGE, 90.
 WOMAN'S COLLEGE (Illinois), 140.
 WOOSTER, UNIVERSITY OF, pension system, 25.
 WORCESTER ACADEMY, Worcester, Massachusetts, Prussian exchange teacher, 16, 17.
 Worcester (Massachusetts) high schools, 17.
 WORCESTER POLYTECHNIC INSTITUTE, 7.
 Cost of allowance system, 89.
 State aid, 152.
 Worthen, Thomas W. D., retired, 8.
 Wyoming, proposed state teachers' pension system, 34.
- YALE UNIVERSITY, 4, 7, 17, 167, 170, 173.
 Advanced standing in, 109, 114, 116-119.
 Allowances granted, 8.
 Cost of allowance system, 89.
 Entrance requirements, 104, 106, 109.
 Financial report, 132.
 Former pension system, 24.
 Pensions granted, 9.





11
1102

LB
2334
C3
1911/12

Carnegie Foundation for the
Advancement of Teaching
Report

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY
