statements for 1890, as made to the Connecticut Insurance Department, we are now able to present an exhibit of this difference, so far as the leading life assurance companies of the United States are concerned. We have included in the following table all companies reported as above owning stocks and bonds exceeding one million dollars, excepting the Mutual Benefit and Northwestern, neither of which reports "cost value" of stocks and bonds.

STOCKS AND BONDS OWNED-18 COMPANIES.

	Cost Value, 1890.	Market Value, 1890.	Excess of Market over	over tages.	
			cost value.	1890.	1889.
Ætna Life	\$11,549,443	£12,266,037	\$716,594	6.20	7.0
Conn. Mutual	11,577,250	11,851,757	274,507	2.37	3.94
Equitable	*46,275,587	47,683,076	1,497,489	3.04	7.23
Germania	4,515,323	4,698,378	183,055	4.05	6.86
Home Life	3,184,539	3.423,856	239,317	7.51	5.20
John Hancock	1,175,609	1,178,454	2,845	0.24	1.50
Manhattan	1,924,712	1,966,909	42,197	2.20	12.18
Massachusetts	4,038,190	4,263,205	225,015	5.57	6.36
Metropolitan	3,010,595	2,934,669	175,926		0.28
Mutual Life	*51,311,631	53,929,451	2,617,820	5.10	7.03
New York Life		67,250,985	3,383,439	5.29	7.1.1
Penn Mutual	6,084,164	6,188,574	104,410	1.71	5.78
Phœnix	1,136,775	1,197,094	60,319	5.30	7.56
Prov. Life & T.	6,055,660	6,284,355	228,695	3.77	4.99
State Mutual	3,256,401	3,452,040	195,639	6.00	6.64
Travelers (Life)	4.294,468	4,176,804	1117,664	••••	••••
Union Mutual	2,725,177	2,7,15,470	20,293	0.75	o \$7
United States	1,826,511	1,887,181	60'610	4.05	6.31
				4.03	
				4.20	
Totals for 1889	204,205,664	217,445,052			6.48
	k value" given.		alue below co	st.	2040

From the above it will be seen that although the increased holdings in 1890, at cost value, were \$23,603. 847, the market values show an excess of only \$9,568,-784, as compared with the excess for 1889 of \$13,239,-388, or, with over \$23,600,000 more invested in 1890, the market value excess was \$3,670,604 less than in 1889. The percentage of excess for 1889 was nearly six and a half, while for 1890 it was a little less than four and a quarter per cent., indicating a shrinkage of over two and a quarter per cent. But the amounts in the uble show total stocks and bonds owned, and of course include a class of securities almost wholly of settled or of appreciating values, viz.: government bonds, State, municipal, township and school bonds, and the like. Of this class there were about \$48,000,000 of the above \$227,909,511 for 1890, on which the excess of market over cost value amounted to \$2,400,000. In 1889 this class of securities amounted to a little more than \$43,000,000 of the \$204,205,664, on which the excess of market over cost value was \$2,100,000. This indicates that on this class of securities the average excess percentage was practically the same for the two years, and that the decrease therefore in the percentage of total excess in 1890 almost wholl, belonged to the fluctuating securities first above referred to. Deducting the 1890 excess of market over cost value of the nonfluctuating securities, as above, from the total excess, we have \$7,168,784 left as the excess belonging to the fluctuating class. The cost value of this class being, in round numbers, \$180,000,000, the percentage of

excess is 3.9. In like manner it is found that the excess of 1889 belonging to the fluctuating securities was \$11,140,000 and the excess percentage 6.9. It therefore appears that the actual shrinkage on the securities especially subject to depression whenever financial disturbances occur was just 3 per cent. from December 31, 1889, to December 31, 1890. We need scarcely say that a comparison based on values two months earlier in 1890 would have revealed a very much larger percentage of difference.

It may be regarded as very creditable to the manage ment of the life companies, that their investments in the various stocks and bonds held have been so well made as to show, under the circumstances, no greater decline: but it is at least demonstrated that the safest class of bond investments to "tie to" is found in numcipal debentures, school bonds, and similar securities rather than those of railway and other transportation companies and bank stocks.

## THE ACTUARIAL SOCIETY OF AMERICA.

The Actuarial Society of America, which held its annual meeting in New York on April 29 and 30, had a very general attendance of members, among those present from the Dominion of Canada being Messes William Hendry, T. B. Macaulay, W. C. Macdonald Geo. Wegenast and J. G. Richter. The president Sheppard Homans, in his opening address congratulated the Society on its progress, stating that since its organization, two years ago, its membership had come to include nearly every actuary in the United State and Canada, two from New Zealand, and one from Australia.

The first day's session was taken up with the discussion of the papers read at the semi-annual meeting is October last, and the evening devoted to a dinner and social enjoyment, participated in by about forty members. The second day was occupied with the reading of interesting papers and the election of officers. The papers read were: "Insurance values as Bases for Surrender charges," by Sheppard Homans; "Insurance values and Distribution of Surplus," by Wm. Hendry: "Principles Involved in Graduation," by Walter S. Nichols; "Tate's Arithmometer," by Max H. Peiler; "A Standard of measuring the effects of Selection among Insured Lives," by Wm. D. Whiting. "A method of Measuring the Maximum Amount what an Insurance Company may properly assume on a Single Risk," by Clayton C. Hall; "Weight and Longevity," by T. B. Macaulay; and "Double Endow ments," by Israel C. Pierson.

The election of officers resulted as follows. David Parks Fackler, president; H. W. St. Jehn, 1st vice president: Emory McClintock, 2nd vice-president: Israel C. Pierson, secretary; Bloomfield J. Miller, trasurer. Other members of Council are: Oscar B. Ireland David H. Wells, Wm. McCabe, Geo. W. Phillips Sheppard Homans, and Rufus W. Weeks.

The next meeting is to be held at Toronto on September 30th and October 1st, upon the invitation of the Canadian members.