is addressed), may be interested in seeing a proof that the difference between the annual Premiums is one wholly due to the transfer of the deaths and subsequent interest-pooling of the same. Thus, taking the H^M Premiums as payable, and the O^M death rate as operating, the value of the resulting profit, where $= l_x$ and i does not vary, will be as follows:

$$P_x\,(l'_x - l_x) \qquad d_x - d'_x$$
$$P_x\,(l'_{x+1} - l_{x+1}) \qquad d_{x+1} - d'_{x+1}$$

Discounting and summing, we get the value of the profit

$$B = P_x\,[(l'_x - l_x) + v\,(l_{x+} - l_{x+1}) + \ldots]+$$
$$v\,(d_x - d'_x) + V^2\,(d_{x+1} - d'_{x+1}) + \ldots$$

and dividing by $l'_x\ (= l_x)$

$$= \quad (P_x - P'_x)\,(1 + a'_x) \qquad (i)$$

The annual equivalent of which is $P_x - P'_x$

Similarly, if the premiums be upon the O^M basis and the death-rate eventuating be as H^M, then the value of the loss will be

$$L = (P_x - P'_x)\,(1 + a_x).$$

I recommend the student to try the effect upon the premiums for endowment assurances and other classes, and also to institute some experiments with the old Northampton Table as o:e of the standards. He will thus acquire a good deal of practical, and bottom knowledge.

In conclusion, let me add that I have brought out a complete set of the l column for each fifth entry-age, and by the four tables referred to in the statement, with summaries of the same, and, also, specimens of the Reserves at 2½, 3, 3½ and 4 per cent. Before I leave England, I will place the whole at the disposition of the President of the Institute, to be available for any student.

Your obedient Servant,

RALPH P. HARDY.

61 Addison Road, W.
8th June, 1901.

Specimens of Annual Premiums, and of Reserves for Each 100 Assured.

Where $100_n V_x = 100\left(1 - \frac{1 + a_{x+n}}{1 + a_x}\right)$

Interest: 3 per cent.

x	n	100 P_x				100$_n$ V_x						n	x
		OLD EXPERIENCE.		NEW EXPERIENCE.		OLD EXPERIENCE.			NEW EXPERIENCE.				
		H^M	H^M (5)	O^M	O^M (5)	H^M	H^M (5)	H^M and H^M (5)	O^M	O^M (5)	O^M and O^M (5)		
						$x + n = 55$							
20	35	1·427	1·582	1·306	1·410	43·18	41·70	43·71	44·15	42·92	44·30	35	20
25	30	1·625	1·745	1·524	1·603	40·59	39 58	41·14	41 26	40 38	41·42	30	25
30	25	1·880	1·959	1·790	1·846	37·25	36·81	37·84	37·74	37·16	37·91	25	30
35	20	2·192	2·268	2·116	2·156	33·15	32·8[illegible]	33·78	33·42	33·07	33·60	20	35
40	15	2·589	2·657	2·524	2·555	27·96	27·75	28·64	28·03	27·81	28·22	15	40
45	10	3·114	3·185	3·046	3·072	21·09	20·91	21·83	21·11	20·98	21·32	10	45
50	5	3·801	3·879	3·730	3·753	12·10	11·91	12·92	12·06	11·98	12·29	5	50
						$x + n = 60$							
20	40	1·427	1·582	1·306	1·410	51·24	49·91	51·63	51·98	50·87	52·06	40	20
25	35	1·625	1·745	1·524	1·603	49·02	48·09	49·43	49 49	48·68	49·58	35	25
30	30	1·880	1·959	1·790	1·846	46 16	45·71	46·59	46·47	45·92	46·56	30	30
35	25	2·192	2.268	2·116	2·156	42·64	42·26	43·10	42·75	42·40	42·85	25	35
40	20	2·589	2·657	2·524	2·555	38·18	37·93	38·68	38·11	37·87	38·22	20	40
45	15	3·114	3·185	3·046	3·072	32·29	32·04	32·83	32·17	31·99	32·28	15	45
50	10	3·801	3·879	3·730	3·753	24·57	24·31	25·18	24·38	24·25	24·51	10	50
55	5	4·725	4·797	4·641	4·661	14·19	14·08	14 88	14·01	13·94	14.16	5	55
						$x + n = 66$							
20	45	1·427	1·582	1·306	1·410	59·13	57·96	59 41	59·71	58.75	59·75	45	20
25	40	1·625	1·745	1·524	1·603	57·27	56 44	57·56	57·62	56 91	57·66	40	25
30	35	1·880	1·959	1·790	1·846	54·87	54·44	55·18	55·08	54·59	55·13	35	30
35	30	2·192	2·268	2·116	2·156	51·92	51 54	52 25	51·97	51·63	52·01	30	35
40	25	2·589	2·657	2·524	2·555	48·19	47·91	48·54	48 08	47·83	48·13	25	40
45	20	3·114	3·185	3·046	3 072	43 24	42·97	43·63	43·09	42·89	43·14	20	45
50	15	3·801	3·879	3·730	3·753	36·78	36·48	37·21	36·56	36·40	36·61	15	50
55	10	4·725	4·797	4·641	4·661	28.07	27·89	28·57	27·86	27.74	27·93	10	55
60	5	5·987	6·060	5·872	5·887	16·18	16·08	16·76	16·10	16·03	16·18	5	60