

**WAGES POLICY AND
THE PRICE LEVEL**

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BY

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of actual wage-rates as one of the given conditions, and therefore ascribe to price fluctuations the whole of the damage. Others assume that if wage-rates were altered as quickly and as much as in these circumstances they should be, the harm done by a fluctuating price level, in causing or enlarging fluctuations in the equilibrium rate of wages, would be relatively small.

It is the aim of the present essay to see what is the truth in this respect. An attempt will therefore be made to find out not only how far wage-rates, with economic advantage to the community, could be made to conform to changes in the monetary demand for labour—and therefore how much of the unemployment resulting from those changes would be removed—but also, as an essential part of the analysis, by what means this adaptation of wage-rates could be brought about. Thus while it is hoped to shed some light on an aspect of monetary policy, the main task will be to study the separate problem of how, and to what extent, the level of wage-rates could be kept adjusted to a variable price level that is taken as given.

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K. S. I.

*University of Edinburgh,
January 1934.*

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APPENDIX
STATISTICAL TABLES

TABLE I
POST-WAR WAGE-RATES, WHOLESALE PRICES, AND UNEMPLOYMENT, IN GREAT BRITAIN

Year.	Q'r.	I. Index of Money Wage- Rates.	II. Index of Wholesale Prices.	III. Index of Product Wage- Rates.	IV. Unemploy- ment Per- centage.
1922	4	100.56	94.0	107.0	12.8
1923	1	100.0	95.2	105.0	12.5
	2	100.0	96.4	103.7	11.3
	3	98.31	94.5	104.0	11.7
	4	97.74	97.0	100.1	11.3
1924	1	98.31	100.0	98.3	10.8
	2	100.0	98.8	101.2	9.5
	3	101.13	99.4	101.7	10.3
	4	101.13	102.4	98.7	10.8
1925	1	100.5	101.6	98.9	11.2
	2	101.0	96.0	105.2	11.2
	3	100.5	93.9	107.0	11.8
	4	100.5	92.0	109.2	10.9
1926	1	100.5	88.6	113.4	10.4
	2	100.5	87.2	115.3	12.7
	3	100.0	90.2	110.9	14.0
	4	100.5	90.4	111.2	13.0
1927	1	100.5	85.6	118.0	10.9
	2	101.0	84.8	119.1	9.0
	3	101.0	85.1	118.7	9.3
	4	101.0	84.8	118.5	9.7
1928	1	100.5	84.6	118.2	10.2
	2	100.0	86.1	116.1	10.0
	3	100.0	83.8	119.0	11.5
	4	99.7	83.1	119.7	11.6
1929	1	99.5	83.6	119.0	11.4
	2	99.5	82.2	121.0	9.7
	3	99.3	82.1	121.0	9.8
	4	99.0	80.7	122.7	10.7
1930	1	98.7	76.9	128.3	13.0
	2	98.3	73.4	133.9	14.9
	3	98.25	70.7	139.0	17.1
	4	98.25	67.0	146.6	19.3
1931	1	97.9	64.0	152.9	21.6
	2	97.0	62.8	154.5	21.2

Column I. Dr. Bowley's Index (1924 = 100). *London and Cambridge Economic Service.*

Column II. Index of the Board of Trade (1924 = 100).

Column III. The index of wage-rates in each quarter as a percentage of that of wholesale prices.

Column IV. *Ministry of Labour Gazette*, Aug. 1931, p. 301.

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TABLE II

WAGE-RATES, WHOLESALE PRICES, AND UNEMPLOYMENT,
IN AUSTRALIA

Year.	Quarter.	I. Index of Money Wage-Rates. (Adult Males.) (1912 = 1,000).	II. Index of Wholesale Prices. (1911 = 1,000).	III. Index of Product Wage-Rates.	IV. Unemployment Percentage.	V. 3-quarterly moving Average of Unemployment.	VI. Rate of Change in Wholesale Prices.	VII. 3-quarterly moving Average of Rate of Change in Whole- sale Prices.
1913	1		1111		6.4			
	2		1095		7.3	6.9	98.56	
	3		1072		7.0	6.6	97.90	98.82
	4		1072		5.3	6.1	100.0	99.70
1914	1		1085		5.9	5.6	101.21	101.30
	2	1079	1113	96.9	5.7	7.4	102.58	103.42
	3	1084	1185	91.5	10.7	9.1	106.47	104.17
	4	1085	1225	88.6	11.0	11.2	103.46	107.72
1915	1	1085	1387	78.2	12.0	10.8	113.22	112.12
	2	1088	1660	65.5	9.5	10.1	119.68	114.22
	3	1093	1822	60.0	8.8	8.4	109.76	104.73
	4	1102	1544	71.4	6.8	7.2	84.74	97.26
1916	1	1117	1502	74.4	5.9	6.0	97.28	93.81
	2	1130	1493	75.7	5.3	5.5	99.40	99.16
	3	1145	1505	76.1	5.3	5.8	100.80	100.27
	4	1184	1514	78.2	6.7	6.5	100.60	100.66
1917	1	1198	1525	78.6	7.5	6.8	100.59	101.75
	2	1218	1587	76.7	6.3	7.0	104.07	104.24
	3	1234	1715	72.0	7.1	6.9	108.06	105.77
	4	1252	1804	69.4	7.4	6.7	105.19	105.78
1918	1	1255	1877	66.9	5.5	6.4	104.10	104.22
	2	1259	1940	64.9	6.2	5.9	103.36	102.73
	3	1268	1954	64.9	6.1	5.9	100.72	101.55
	4	1296	1965	66.0	5.5	6.0	100.56	99.90
1919	1	1320	1934	68.3	6.5	6.8	98.42	100.17
	2	1338	1956	68.4	8.5	7.1	101.14	101.76
	3	1361	2068	65.8	6.2	6.6	105.73	105.42
	4	1462	2262	64.6	5.2	5.7	109.38	106.35

TABLE II—(continued)

Year.	Quarter.	I. Index of Money Wage-Rates, (A dult males, '1911, = 1000.)	II. Index of Wholesale Prices. (1911 = 1,000.)	III. Index of Product Wage-Rates.	IV. Unemployment Percentage.	V. 3-quarterly moving Average of Unemployment.	VI. Rate of Change in Wholesale Prices.	VII. 3-quarterly moving Average of Rate of Change in Whole- sale Prices.
1920	1	1522	2351	64.7	5.6	5.7	103.93	107.50
	2	1574	2567	61.3	6.2	6.0	109.19	105.45
	3	1660	2650	62.6	6.2	6.7	101.23	100.39
1921	4	1752	2352	74.5	7.8	8.5	88.75	94.66
	1	1807	2164	83.4	11.4	10.6	92.01	89.47
	2	1820	1897	95.9	12.5	11.8	87.66	91.91
1922	3	1833	1822	100.6	11.4	11.1	96.05	92.87
	4	1844	1729	106.6	9.5	10.0	94.90	95.87
	1	1834	1671	109.1	9.2	9.4	96.65	98.62
1923	2	1801	1743	103.3	9.6	9.5	104.31	101.14
	3	1786	1786	100.0	9.6	9.3	102.47	103.10
	4	1785	1831	97.5	8.6	8.5	102.52	102.03
1924	1	1783	1851	96.3	7.2	7.6	101.09	103.09
	2	1785	1956	91.3	7.1	7.2	105.67	103.05
	3	1813	2003	89.0	7.4	7.0	102.40	102.07
1925	4	1840	1966	93.6	6.6	7.1	98.15	99.84
	1	1848	1946	95.0	7.6	7.5	98.98	97.91
	2	1840	1880	97.9	8.3	8.5	96.61	97.96
1926	3	1838	1848	99.5	9.5	9.4	98.30	98.63
	4	1839	1866	98.5	10.3	9.7	100.97	99.44
	1	1840	1848	99.6	9.3	9.9	99.04	99.59
1927	2	1846	1825	101.1	10.2	9.1	98.75	99.68
	3	1869	1848	101.1	7.9	8.7	101.26	100.48
	4	1887	1856	101.7	8.1	8.1	100.43	100.29
1928	1	1892	1841	102.8	8.2	7.7	99.19	100.80
	2	1904	1892	100.6	6.7	7.5	102.77	99.60
	3	1922	1832	104.9	7.6	6.7	96.83	98.63
1929	4	1938	1764	109.9	5.7	6.4	96.29	97.20
	1	1944	1737	111.9	5.9	6.0	98.47	98.37
	2	1942	1743	111.4	6.4	6.3	100.35	102.27
1930	3	1944	1882	103.2	6.7	7.3	107.98	103.17
	4	1955	1904	102.7	8.9	8.8	101.17	101.93
	1	1966	1840	106.8	10.7	10.3	96.64	98.91
1931	2	1963	1820	107.9	11.2	11.1	98.91	97.49
	3	1963	1764	111.3	11.4	10.8	96.92	98.23
	4	1959	1744	112.3	9.9	10.2	98.87	99.44

TABLE II—(continued)

Year.	Quarter.	I. Index of Money Wage-Rates. (Adult-Males.) (1911 = 1,000.)	II. Index of Wholesale Prices. (1911 = 1,000.)	III. Index of Product Wage-Rates.	IV. Unemployment Percentage.	V. 3-quarterly moving Average of Unemployment.	VI. Rate of Change in Wholesale Prices.	VII. 3-quarterly moving Average of Rate of Change in Whole- sale Prices.
1929	1	1958	1788	109.5	9.3	9.7	102.52	100.58
	2	1977	1794	110.2	10.0	10.5	100.34	101.66
	3	1979	1832	108.0	12.1	11.7	102.12	100.22
	4	1974	1799	109.7	13.1	13.3	98.20	97.90
1930	1	1973	1680	117.4	14.6	15.4	93.39	96.94
	2	1956	1667	117.3	18.5	17.9	99.23	96.18
	3		1599		20.5		95.92	

Column I, from *Quarterly Bulletins of Statistics*, and *Australian Year Books*, Nos. 20-23.

Columns II and IV, from *Development and Migration Commission's Report on Unemployment and Business Stability in Australia*, p. 49, and from *Quarterly Bulletins of Statistics*.

Column III is obtained by dividing the index of wage-rates by the index of wholesale prices for each year and multiplying by 100.

Column VI is obtained by dividing the index of wholesale prices for each year by that of the preceding year and multiplying by 100.

Columns V and VII are 3-quarterly moving averages of columns IV and VI respectively.

TABLE III

PRE-WAR WAGE-RATES, WHOLESALE PRICES, AND UNEMPLOYMENT, IN GREAT BRITAIN

Year.	I. Index of Money Wage-Rates. (1850 = 100.)	II. Index of Wage- Rates with trend removed.	III. Index of Whole- sale Prices. (1900 = 100.)	IV. Index of Whole- sale Prices with trend removed.	V. Index of Pro- duct Wage- Rates.	VI. Index of Pro- duct Wage- Rates with trend removed.	VII. Trade Union Unemployment Percentage.
1850	100	160	107	83	93.4	205.4	
1851	100	159	110	86	90.9	202.9	3.9
1852	100	158	108	84	92.6	204.6	6.0
1853	110	167	123	99	89.4	201.4	1.7
1854	114	170	138	114	82.6	194.6	2.9
1855	116	171	133	109	87.2	199.2	5.4
1856	116	170	137	113	84.7	196.7	4.7
1857	112	165	142	118	78.9	190.9	6.0
1858	110	162	127	103	86.6	198.6	11.9
1859	112	163	128	104	87.5	199.5	3.8
1860	114	164	132	108	86.4	198.4	1.9
1861	114	163	131	107	87.0	199.0	5.2
1862	116	164	135	111	85.9	197.9	8.4
1863	117	164	137	113	85.4	197.4	6.0
1864	124	170	140	116	88.6	200.6	2.7
1865	126	171	135	111	93.3	201.8	2.1
1866	132	176	136	112	97.1	202.1	3.3
1867	131	174	133	109	98.5	200.0	7.4
1868	130	172	132	108	98.5	196.5	7.9
1869	130	171	131	107	99.2	193.7	6.7
1870	133	173	128	104	103.9	195.9	3.9
1871	138	177	133	109	103.8	191.3	1.6
1872	146	184	145	121	100.7	184.0	0.9
1873	155	192	147	124	105.4	185.9	1.2
1874	156	192	136	114	114.7	191.7	1.7
1875	154	189	128	107	120.3	193.8	2.4
1876	152	186	127	107	119.7	189.7	3.7
1877	151	184	125	106	120.8	187.3	4.7
1878	148	180	116	98	127.6	190.0	6.8
1879	146	177	111	94	131.5	191.0	11.4
1880	147	177	117	101	125.6	181.0	5.5
1881	147	176	113	98	130.1	182.6	3.5
1882	147	175	112	98	131.3	180.3	2.3
1883	149	176	109	96	136.7	182.2	2.6

TABLE III—(continued)

Year.	I. Index of Money Wage-Rates. (1850 = 100.)	II. Index of Wage- Rates with trend removed.	III. Index of Whole- sale Prices. (1900 = 100.)	IV. Index of Whole- sale Prices with trend removed.	V. Index of Pro- duct Wage- Rates.	VI. Index of Pro- duct Wage- Rates with trend removed.	VII. Trade Union Unemployment Percentage.
1884	150	176	101	89	147.5	189.5	8.1
1885	159	174	96	85	155.2	193.7	9.3
1886	148	172	92	82	160.9	195.9	10.2
1887	149	172	91	82	163.6	195.1	7.6
1888	151	173	93	85	162.3	190.3	4.9
1889	156	177	96	89	162.5	187.0	2.1
1890	163	183	96	90	169.8	190.8	2.1
1891	163	182	96	91	169.8	187.3	3.5
1892	162	180	91	87	178.0	192.0	6.3
1893	162	179	91	88	178.0	188.5	7.5
1894	162	178	84	82	192.8	199.8	6.9
1895	162	177	83	82	195.2	198.7	5.8
1896	163	177	81	81	201.2	201.2	3.3
1897	166	179	83	82	200.0	201.5	3.3
1898	167	179	85	83	196.5	199.5	2.8
1899	172	183	91	88	189.0	193.5	2.0
1900	179	189	100	96	179.0	185.0	2.5
1901	179	188	93	88	192.5	200.0	3.3
1902	176	184	92	86	191.3	200.3	4.0
1903	174	181	92	85	189.6	200.1	4.7
1904	173	179	93	85	186.0	198.0	6.0
1905	174	179	96	87	181.2	194.7	5.0
1906	176	180	103	93	170.9	185.9	3.6
1907	182	185	107	96	170.1	186.6	3.7
1908	181	183	97	85	185.6	203.6	7.8
1909	179	180	99	86	180.9	200.4	7.7
1910	179½	179½	104	90	176.2	193.6	4.7

Column I. Reproduced from Layton, *Introduction to the Study of Prices*, p. 150.

Columns III and IV. Reproduced from Pigou, *Industrial Fluctuations*, pp. 363-64.

Column V. Index of money wage-rates divided by index of wholesale prices and multiplied by 100.

Columns II, IV and VI are the figures respectively of Columns I, III and V, with trend removed. For methods of removing these trends see p. 206, footnote.

Column VII. From Pigou, *ibid.*, pp. 353-54.

TABLE IV
 AUSTRALIAN BANKING STATISTICS, 1901-28
 (For the quarter ending 30th June in each year.)

Year.	I. Excess of De- posits over Advances and Investments.	II. Proportion of Non- interest-bearing Deposits to Total Deposits.	III. London Balances of Australian Banks with London Offices.
	£ m.	%.	£ m.
1901	3.25	40.85	- 2.32
1902	5.71	40.26	- 1.75
1903	3.53	40.39	- 2.97
1904	4.50	38.90	- 2.74
1905	12.98	37.55	2.30
1906	19.29	38.53	5.63
1907	18.46	41.51	5.02
1908	12.85	40.48	- 2.93
1909	20.07	39.75	6.24
1910	29.28	42.52	18.43
1911	30.68	43.38	12.26
1912	26.05	43.66	12.14
1913	30.91	41.39	21.48
1914	40.67	42.84	19.11
1915	46.85	43.08	19.86
1916	44.22	48.11	- 5.16
1917	63.33	50.39	24.20
1918	58.33	49.95	23.97
1919	44.29	47.77	24.90
1920	67.80	50.41	42.22
1921	40.74	45.23	6.56
1922	56.32	49.1	25.39
1923	56.28	46.4	23.08
1924	46.31	48.0	29.99
1925	60.25	46.8	60.78
1926	52.44	45.6	41.20
1927	21.87	43.7	28.82
1928	21.20	40.3	56.81

Column I. Includes the Commonwealth Bank's "Savings Deposits."
 Calculated from the figures of Deposits and of Advances and Investments
 given in the *Australian Finance Bulletins*:—Nos. 11, p. 74; 18, p. 41;
 and 19, p. 38.

Column II. *Finance Bulletins*:—Nos. 11, p. 48; 12, p. 47; and 22, p. 40.

Column III. London balances are the excesses of the assets in London over
 deposit liabilities in London of all Australian banks with London offices.

TABLE V
 AUSTRALIAN BALANCE OF PAYMENTS, 1901-28
Credits.

Year.	I. Recorded Exports.	II. Net Increase in Public External Debt.	III. Bawra Dividends.	IV. Total Credits.
	£ m.	£ m.	£ m.	£ m.
1901	49·70	5·2		54·90
1902	43·92	6·7		50·62
1903	48·25	5·0		53·25
1904	57·49	1·7		59·19
1905	56·84	0·7		57·54
1906	69·74	2·0		71·74
1907	72·82	- 5·3		67·52
1908	64·31	- 2·3		62·01
1909	65·32	6·1		71·42
1910	74·49	2·6		77·09
1911	79·48	8·8		88·28
1912	70·10	6·8		76·90
1913	78·57	14·4		92·97
1914-15	60·59	5·3		65·89
1915-16	74·78	4·3		79·08
1916-17	97·96	18·6		116·56
1917-18	81·43	20·9		102·33
1918-19	113·96	0·5		114·46
1919-20	149·82	10·8		160·62
1920-21	132·16	11·3	7·7	151·16
1921-22	127·85	42·2	9·9	179·95
1922-23	117·87	3·9	5·9	127·67
1923-24	119·49	48·1	5·3	172·89
1924-25	162·03	0·1		162·13
1925-26	148·56	37·5		186·09
1926-27	144·90	11·8		156·70
1927-28	143·21	54·3	3·9	201·41

Column I. Taken from *Statistical Abstracts for the Dominions*, Nos. 52 and 53, and *Australian Year Book*, No. 21.

Column II. Figures for the years 1901-13 taken from Wood, *Borrowing and Business in Australia*, p. 153; those for 1914-28 from *Australian Year Book*, No. 21, p. 1019.

Column III. Taken from *Australian Year Book*, No. 21.

TABLE V—(continued)
 AUSTRALIAN BALANCE OF PAYMENTS, 1901-28
Debits.

Year.	V. Recorded Imports.	VI. Interest on Public External Debt.	VII. Freight.	VIII. Total Debits.	IX. Balance of Pay- ments.
	£ m.	£ m.	£ m.	£ m.	£ m.
1901	42.43	6.43	3.33	52.19	2.71
1902	40.68	6.61	2.99	50.28	0.34
1903	37.81	6.77	2.54	47.12	6.13
1904	37.02	6.80	2.21	46.03	13.16
1905	38.35	6.85	2.56	47.76	9.78
1906	44.74	6.91	3.35	55.00	16.74
1907	51.81	6.69	3.84	62.34	5.18
1908	49.90	6.59	3.71	60.20	1.81
1909	51.17	6.77	3.82	61.76	9.66
1910	60.01	6.85	4.52	71.38	5.71
1911	66.97	6.54	5.16	78.67	9.61
1912	78.16	6.77	6.27	91.20	- 14.30
1913	79.75	7.35	6.73	93.83	- 0.86
1914-15	64.43	9.26 ^a	16.00 ^b	80.43	- 14.54
1915-16	77.74	10.35 ^a	17.20 ^b	94.94	- 15.86
1916-17	76.23	12.05 ^a	18.40 ^b	94.63	21.93
1917-18	62.33	15.25 ^a	22.00 ^b	84.33	18.00
1918-19	102.36	15.60 ^a	22.20 ^b	124.56	- 10.10
1919-20	98.97	17.26 ^a	23.20 ^b	122.17	38.54
1920-21	163.80	18.23	8.84	190.87	- 39.71
1921-22	103.07	20.49	4.74	128.30	51.65
1922-23	131.76	20.79	5.27	157.82	- 30.15
1923-24	140.62	23.20	6.05	169.87	3.02
1924-25	157.14	23.75	5.97	186.86	- 24.73
1925-26	151.64	25.55	6.37	183.56	2.30
1926-27	164.72	26.83	6.92	198.47	- 41.77
1927-28	148.12	31.09	5.78	184.99	16.42

Column V. As for Column I.

Column VI. Taken from Wood, *ibid.*, pp. 153 and 169.

Column VII. Figures for the years 1901-13 and 1921-28 taken from Wood, *ibid.*, pp. 162 and 204; those for 1914-20 from *Australian Year Book*, No. 21, p. 204.

^a These figures are for "Interest and Services."

^b The figures in Column VI are not included in the calculation for these years.

TABLE VI
ANNUAL AVERAGE MARKET RATE OF DISCOUNT (THREE
MONTHS) IN LONDON

Year.	London Market. Rate of Discount.	Year.	London Market. Rate of Discount.
	%.		%.
1901 . .	3.17	1915 . .	3.70
1902 . .	2.97	1916 . .	5.21
1903 . .	3.38	1917 . .	4.81
1904 . .	2.68	1918 . .	3.59
1905 . .	2.62	1919 . .	3.94
1906 . .	3.97	1920 . .	6.40
1907 . .	4.49	1921 . .	5.21
1908 . .	2.29	1922 . .	2.65
1909 . .	2.28	1923 . .	2.70
1910 . .	3.18	1924 . .	3.54
1911 . .	2.92	1925 . .	4.10
1912 . .	3.63	1926 . .	4.51
1913 . .	4.37	1927 . .	4.21
1914 . .	2.88	1928 . .	4.15

The figures for the years 1901-11 are taken from Pigou, *Industrial Fluctuations*, p. 371; those for the years 1912-28 are taken from the *Banking Supplements of the Economist*, May 1918 and May 1929.

TABLE VII

QUARTERLY EXCESS OF AUSTRALIAN BANK DEPOSITS OVER
ADVANCES AND INVESTMENTS

Year.	Q'r.	I. Excess of Deposits over Advances and Investments.	II. 3-quarterly moving Average of Col. I.	Year.	Q'r.	I. Excess of Deposits over Advances and Investments.	II. 3-quarterly moving Average of Col. I.
		£ m.	£ m.			£ m.	£ m.
1913	1	26.7	—	1921	1	19.0	20.6
	2	26.6	26.0		2	26.2	23.7
	3	24.8	26.6		3	26.0	26.3
	4	28.3	29.8		4	26.8	28.9
1914	1	36.4	33.5	1922	1	34.0	32.5
	2	35.8	33.8		2	36.8	34.3
	3	29.1	30.5		3	32.2	32.5
	4	26.7	29.8		4	28.6	31.6
1915	1	33.5	33.5	1923	1	34.0	32.6
	2	40.4	37.5		2	35.3	29.7
	3	38.7	37.4		3	19.7	24.5
	4	33.1	35.0		4	18.4	23.3
1916	1	33.1	30.9	1924	1	31.9	26.4
	2	26.6	27.4		2	28.8	23.6
	3	22.6	22.9		3	10.2	21.1
	4	19.5	22.1		4	24.2	25.8
1917	1	24.2	26.9	1925	1	43.1	35.2
	2	37.1	33.6		2	38.2	36.2
	3	39.6	37.8		3	27.4	30.1
	4	36.6	38.6		4	24.7	30.5
1918	1	39.6	36.0	1926	1	39.4	32.0
	2	31.9	30.4		2	31.9	30.1
	3	19.7	21.3		3	19.1	21.3
	4	12.3	16.3		4	13.0	17.6
1919	1	16.9	16.0	1927	1	20.7	17.3
	2	18.7	20.1		2	18.1	16.4
	3	24.7	27.3		3	10.5	14.9
	4	38.6	38.0		4	16.0	—
1920	1	50.6	44.8				
	2	45.1	42.9				
	3	33.0	31.5				
	4	16.5	22.8				

Calculated from the figures given in the Development and Migration Commission's *Report on Unemployment and Business Stability in Australia* (1928), p. 52.

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