

## INDUSTRIAL PROGRESS.

### THE PERIOD PRECEDING THE GOLD DISCOVERIES.

THE discovery of gold in 1851 divides the industrial history of Australia into two periods, the main characteristics of which are absolutely dissimilar. Prior to the discoveries of the precious metal, Australia appeared to be destined for a purely pastoral country. Its distance from the world's markets, and the fewness of its population, militated against any decided progress in agriculture; but the people were encouraged to devote their attention to a fuller development of the pastoral industry by the circumstance that a local market was not necessary. Moreover, the products of both sheep and cattle were so valuable that the heavy cost of carriage to England could be borne, and an ample margin still left to compete successfully with Russia, Germany, Spain, Portugal, and America, the great wool-growing countries of that epoch. This one-sided development of the country's resources was manifestly dangerous to industrial stability, as a succession of drouthy seasons might have had the effect of disturbing the business of the whole country; and this, indeed, was what from time to time actually happened.

Other industries would doubtless have followed in the wake of the great pastoral industry as time went on, and there were not wanting signs that, with an assured market, attention would be given to agriculture, and the manufacture of certain articles of local consumption.

The development of the industries of Australia along their natural lines must undoubtedly have been attended with ultimate success, but the colonists were not content to grow prosperous in such a humdrum way, and early in the forties there was intense speculation in land allotments in towns. Large and small country areas also were disposed of, and redispensed of, at prices far beyond what was warranted by any return that could be obtained from their immediate or prospective use, and many persons grew rich by the tossing backwards and forwards of title deeds. The business of land jobbing was, moreover, encouraged by the action of the local Government which from time to time disposed of considerable areas of land, and frequently altered its policy in regard to the public estate.

Land speculation, carried to excess, has tended on more than one occasion in Australia to a commercial crisis, and the disasters of 1842 and 1843 were undoubtedly attributable to this cause. They were accelerated, however, by the unwise action of the Government in

regard to its financial operations. Having sold much land, the Government was possessed of considerable funds, which were placed with the banks, at one time fully £350,000 being deposited, and the highest rates of interest exacted therefor. The banks accepting these deposits were obliged, on their part, to reissue equivalent sums in discounts, in order to pay the interest demanded of them. They, therefore, readily entered into the spirit of the times, and their willingness to lend stimulated amazingly the dealings in land purchase. It thus happened that business was transacted in a vicious circle. The Government, by selling land, thereby accumulated an amount of money, which was deposited with the banks, the money so deposited being loaned by the latter to their customers for the purpose of buying more land from the Government, the latter depositing the sums paid to them, which again were loaned for the purpose of land buying; and by this means the business of speculation was kept alive so long as the Government maintained its balance with the banks. The immigration policy of the Government, however, made large calls upon it, and the Treasury found itself compelled to withdraw its deposits upon very short notice. To meet this sudden call, the banks were compelled, to the utmost inconvenience of their customers, immediately to restrict their discounts and curtail advances, and it was this sudden contraction of credit that gave the initial downward impulse to the money market. The issue could hardly have been otherwise than as happened, and a financial crisis immediately resulted. The year 1842 was one of acute financial distress. In Sydney, property of all kinds became unsaleable, and many business houses, including some of the principal ones, became insolvent. For nearly two years the failures were at the rate of from fifty to sixty a month. A similar condition of affairs prevailed in Melbourne, and the distress was also keenly felt in Adelaide and Tasmania. The local prices of all descriptions of produce were ruinously low, and were still further depressed by reason of the large number of bankruptcies involving forced sales of real property, stock, wool, furniture, ships—indeed, of everything which promised a return, however small. Historians of that period relate cases of enforced sales at which sheep brought very small prices—as little as 6d. being obtained for them; while cattle occasionally realised only 7s. 6d., and valuable horses only £3 each. Boiling down, meat canning, and other devices were resorted to in order to revive the commerce of the country from the stagnation and lethargy into which it had fallen; yet, notwithstanding all expedients, the outlook steadily became more gloomy, prices continued seriously to decline, and speculation was at a standstill. South Australia was the first to emerge from the all-pervading depression. In 1844, copper arrived in Adelaide from the Kapunda Mine, and in 1845 the famous Burra Burra Mine was discovered. Other finds came in quick succession. Population was speedily attracted, and as the mines yielded beyond all expectation a season of prosperity at once ensued. The discovery of copper in South Australia proved to be of advantage to the rest

of Australia. Labourers and others were attracted to Adelaide from the neighbouring provinces, though not in such large numbers as would have relieved the labour markets. The men employed in the copper mines were able to earn 7s. per day, which at the time was considered a very high wage. Skilled mechanics were not so well remunerated; plasterers were paid from 4s. to 7s., very few getting the higher wage; painters' wages ranged from 4s. to 5s. 6d.; blacksmiths' from 4s. to 5s.; wheelwrights' 5s. to 5s. 6d. Carpenters' wages ranged from 5s. 6d. to 6s. 6d. per day—the highest rates paid to mechanics; bricklayers and masons earned from 5s. 6d. to 6s. per day. Farming hands were paid 10s. to 12s. per week with rations and sleeping accommodation, and were in much request. Domestic servants were in demand at wages varying from £14 to £22 per annum with board and lodging, and the supply was insufficient. The wages quoted were greatly in excess of those obtained prior to the discovery of copper and about 20 per cent. higher than for similar employment in New South Wales.

The average wages paid in New South Wales prior to 1851 were as indicated in the accompanying statement. Inferior workers, of whom there was naturally a considerable proportion, considering the origin of a large part of the population, did not receive within 20 per cent. of the rates quoted:—

Trade or Calling.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.
-------------------	-------	-------	-------	-------	-------	-------	-------	-------

*Males, per day, without board and lodging.*

	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Carpenters .....	5	0	4	0	4	0	5	2	5	6	5	3	4	9	4	6		
Smiths .....	5	0	4	0	4	3	5	2	5	6	5	3	4	9	4	6		
Masons .....	5	0	4	0	4	0	5	2	5	6	5	3	4	9	4	6		
Bricklayers .....	5	0	4	0	4	0	5	2	5	6	5	3	4	9	4	6		
Wheelwrights .....	4	0	3	6	3	3	4	8	5	0	5	3	4	9	4	6		

*Males, per annum, with board and lodging.*

	£	£	£	£	£	£	£	£	£
Farm labourers .....	15	15	18	20	23	21	18	18	
Shepherds .....	14	14	17	20	23	21	18	18	

*Females, per annum, with board and lodging.*

	£	£	£	£	£	£	£	£
Cooks .....	15	15	18	20	22	21	17	17
Housemaids .....	15	15	15	17	17	17	14	13
Laundresses .....	12	12	15	17	19	18	15	15
Nursemaids .....	10	10	12	15	16	14	9	9
General servants .....	12	12	16	16	18	16	12	14
Farm-house servants .....	10	10	12	16	17	16	12	11
Dairy-women .....	10	10	12	16	17	16	12	11

These rates show a great reduction on those obtaining in 1841, in which year mechanics' wages stood at 7s. 6d. to 8s. per day, and those of farm servants at £25 a year. In the Port Phillip district wages

were generally higher than in Sydney, as also were those of Tasmania. A schedule of the latter is given below. The fall in wages was in a measure compensated for by a lowering of the price of provisions. During this period the average price of beef in the Australian cities ranged from 2½d. to 6¾d. per lb., and of mutton from 2d. to 3d. per lb. The price of flour ranged from 14s. to 24s. per 100 lb. These prices were very greatly below those paid prior to the crisis. Bread, for example, in 1839 sold at 11½d. the 2 lb. loaf; in 1843 the price was 3½d., and thereafter it did not rise higher than 5d. until after the gold discoveries. House rents, however, continued high.

Throughout the period the demand for pastoral and agricultural labour was always fairly keen, and the stream of bounty-paid immigrants was maintained in spite of the fall in wages and the restriction in employment. The immigrants, however, were mainly of the agricultural class—shepherds, gardeners, and useful mechanics for country employment,—who were readily absorbed by the community. The condition of the mechanics who clung to the towns was one of great distress. Inferior men could not earn more than 2s. 6d. per day, and at no time was the average for good men more than 5s., while even at those rates employment was at times difficult to obtain.

In Tasmania wages were maintained at a higher level than in New South Wales, and in the undermentioned trades the ruling rates per day were:—

Year.	Bricklayers.	Carpenters.	Masons.	Quarrymen.
	s. d.	s. d.	s. d.	s. d.
1839	7 6	7 6	7 6	5 6
1840	7 6	7 6	7 6	5 6
1841	6 6	6 6	7 0	5 1
1842	7 0	7 0	8 0	5 6
1843	7 0	7 0	7 0	5 0
1844	5 0	5 0	4 6	3 0
1845	6 0	6 0	5 0	4 0
1846	5 6	5 6	5 6	3 0
1847	4 11	4 10	4 10	3 0
1848	4 10	4 8	4 10	3 2
1849	6 0	6 0	6 0	3 6
1850	5 6	5 6	5 6	3 4

The financial crisis of 1842 did not affect Tasmania in the same degree as it did New South Wales, since in the island colony there had been less land jobbing and riotous speculation. The fall in wages in 1844 was accompanied, and, in a measure, brought about, by a fall in the cost of living. It is difficult to determine the retail prices of the various commodities in common use, and to account for the causes of the great variation apparent from year to year. The price of flour, for example, seemed to have a very ill-defined relation to the price of wheat. In 1839, wheat was sold throughout the year at 26s. per bushel, and

flour at 24s. per cwt.; in 1840 the prices were: Wheat 9s. per bushel, and flour 30s. per cwt.; and in 1841, wheat 7s. per bushel, and flour 21s. per cwt. The price of tea was 1s. 6d. per lb. in 1839, and 2s. 6d. and 3s. 3d. in the two following years, and similarly with regard to other articles.

The following were the market prices of six of the leading commodities:—

Year.	Fresh Meat.	Sugar.	Tea.	Rice.	Wheat.	Potatoes.
	per lb. d.	per lb. d.	per lb. s. d.	per lb. d.	per bushl. s. d.	per cwt. s. d.
1838 .....	5½	3½	1 5	3	8 9	6 0
1839 .....	4½	3½	1 6	3	26 0	10 0
1840 .....	6½	3½	2 6	2½	9 0	10 0
1841 .....	6½	3½	3 3	2½	7 0	10 0
1842 .....	4½	3½	2 0	2	6 6	7 0
1843 .....	2½	3	2 6	1½	3 6	5 0
1844 .....	2½	2½	1 6	1½	3 3	4 0
1845 .....	2½	3	1 6	3	3 3	4 6
1846 .....	2½	4	2 3	1½	5 0	3 0
1847 .....	2½	4	2 4	3½	1 10	5 10
1848 .....	2½	3½	2 0	3½	3 6	4 4
1849 .....	2½	3½	1 9	3½	4 1	3 0
1850 .....	2½	3½	1 10	4	4 9	4 0

About the year 1849, the labour market in Sydney was relieved in some measure by the emigration to California which commenced immediately on the announcement of the discovery of gold in that country. But as an amount of ready cash was needed before a person could emigrate, the most distressful part of the local population was little affected by the Californian mines, and it is difficult to imagine what would have happened had not the discovery of gold, in 1851, occurred so opportunely. In an instant the face of everything was changed, as if by the wand of a magician, although the full influence of the discoveries was not felt until the following year.

During the period anterior to the gold discoveries agriculture was entirely subsidiary to sheep and cattle raising, being confined to supplying the wants of the handful of persons scattered round the coastal fringe who then comprised the population of these states. The country was, therefore, dependent upon outside sources for the supply of the greater part of the food stuffs required for ordinary consumption. Signs were not wanting, however, of an early extension of the cultivation of wheat, particularly in South Australia. The plains around Adelaide yielded magnificent crops of the cereal, and when a method of harvesting was discovered which enabled the farmers to gather the crops, in spite of the looseness of the grain in the ear and the extreme brittleness of the straw, the future of the industry at once became more hopeful.

Naturally the manufacturing industries did not make much progress. Manufacturing for export was out of the question, handicapped as the infant settlements were by distance from the centres of civilisation. What industries there were had been called into being by the isolation of the country. The largest number of establishments of any kind were flour mills, of which there were in 1848 about 223; of these 87 were worked by steam, 53 by water, 42 by wind, and 38 by horse-power. The next in importance were establishments for the treatment of leather; then came breweries and distilleries, soap and candle works, iron foundries, brick-works and potteries, and ship and boat building, in the order named. As late as 1848 the industrial establishments of Australia were as comprised in the following list, and the employment afforded did not in all probability exceed 1,800 hands:—

Distilleries .....	2	Blacking manufactories .....	2
Rectifying and compounding ..	2	Meat preserving and salting	
Breweries .....	51	works .....	5
Sugar refineries .....	2	Potteries .....	9
Soap and candle works .....	30	Glass works .....	1
Tobacco and snuff factories .....	5	Copper smelting works .....	1
Woollen mills .....	8	Iron and brass foundries, &c. ....	27
Hat manufactories .....	4	Gas works .....	1
Rope works .....	7	Ship and boat building, repairing	12
Tanneries .....	62	Flour mills .....	223
Salt works .....	5	Oatmeal, groat mills .....	1
Starch manufactories .....	2		

Of the 479 establishments, 272 were in New South Wales, 41 in the Port Phillip district, 99 in Tasmania, and 67 in South Australia. There were possibly a few others in Western Australia, information in regard to which has not been recorded.

Whale-fishing, although now almost unknown in Australian waters, at one time held a very important place amongst the industries of the country. From 1791 onwards there are records of the take of vessels engaged in the industry. In the twenties there were whaling stations belonging to Sydney merchants in various parts of the southern seas, and whale-fishing was afterwards carried on from a Tasmanian base at Frederick Henry Bay and from Portland Bay, Victoria. The colonists of Western Australia had also engaged in the whale fishery, which appears to have been continued by them until the whales had practically disappeared from local waters. The practice of Australian whalers of killing the calves, in order to secure the capture of the mothers, did great damage to the fishery by wastefully thinning out the product, and in 1843 the animal was remarked as becoming somewhat shy and scarce in southern seas. By the year 1847, the industry was declining in southern waters generally, and Australian shipping was engaging more exclusively in the carrying trade, and in time the whaling industry was prosecuted mainly by American vessels. The value of the total quantity of whale oil exported from New South Wales has been estimated at about £3,000,000, and from Tasmania at about £1,200,000.

The principal exports during the year preceding the gold discoveries were wool, tallow, oil, skins, bark, and salt beef. Wool has been one of the staple products of the country from the earliest days of the century, although in some years the product of the fisheries was equally important. Trade was almost wholly confined to the United Kingdom, and in ten years, 1841-50, the quantity of wool exported to that country was:—

	lb.		lb.
1841.....	12,959,671	1846 .....	26,056,815
1842.....	17,433,780	1847 .....	30,034,567
1843.....	17,589,712	1848 .....	35,774,671
1844.....	24,150,687	1849 .....	39,018,221
1845.....	21,865,270	1850 .....	41,426,655

The value of the wool trade for the year 1850 was £1,992,369, and the shares of the present states, according to quantity and value, were:—

	lb.	Value. £
New South Wales ... ..	14,270,622	738,051
Victoria .....	18,091,207	826,190
South Australia .....	2,841,131	113,259
Western Australia .....	368,595	16,000
Tasmania .....	5,855,100	248,869
Total .....	41,426,655	1,992,369

Sperm oil was principally exported from Sydney and Hobart, the value of the trade in 1850 being £65,499, a slightly larger quantity being despatched from Hobart than from Sydney. The value of tallow exported was £311,900, of which £167,858 was sent from Sydney, and £132,863 from Melbourne. In 1850 South Australia was already a copper producing country of some importance, and its export of metal and ore had reached £275,090. Flour was also becoming an item of export worth considering in South Australia and Tasmania, the former having exported in 1850 wheat and flour to the value of £41,491, and the latter £34,565, besides providing for the local consumption.

In 1850 the export of domestic produce, including products of fisheries, from each division of Australia was:—

	£
New South Wales .....	1,158,858
Victoria .....	1,022,064
South Australia .....	570,816
Western Australia .....	30 000
Tasmania .....	558,000

#### INDUSTRIAL PERIOD—1851-8.

##### *The Gold Discoveries.*

The attention of the people of Australia during the period extending from the year 1851 to 1858 was chiefly directed to gold-seeking. The whole period was one of rapid growth and great change. It is chiefly

interesting politically on account of the initiation of responsible government in New South Wales, Victoria, South Australia, and Tasmania, and commercially, because of the construction of the first railroads and the establishment of steam communication with Great Britain.

The discovery of gold not only put an end to the depression of the previous period, but it effected a revolution in all industrial relations. According to contemporary evidence, the supply of labour in many occupations speedily became exhausted, and there were more persons desirous of hiring labourers than there were labourers to be hired. The diggings drained not only Melbourne and Sydney, but Adelaide, Hobart, and every other Australian centre. Most branches of industry and all public works were at a standstill. In New South Wales the sheep and cattle stations were deserted by their hands very shortly after the first great discoveries were made, and for a time it was impossible, in some parts of the colony, to care for the flocks except by the employment of aborigines. In South Australia, during 1852 and 1853, the crops would have remained unharvested if it had not been for the assistance of the blacks, so great was the exodus of farming hands. In Victoria, where the greatest quantity of gold was found, for a brief period no other occupation than gold seeking was thought of, until it was discovered by the reflecting part of the population that trade offered even greater and surer prizes, and there as well as elsewhere every department of industry received a direct stimulus. In Tasmania the people became so infected with the epidemic that there was danger of the island becoming depopulated. The able-bodied men left by every boat, and Bass's Straits became in a brief period a populous waterway from the home of hardship and toil to the visionland of wealth. So great was the exodus that some of the country districts were utterly deserted by the male inhabitants.

The eight or nine years characterised by the rage of the gold fever exercised a very great economic effect on the condition of the working classes ; for had there been no discovery of gold it is not improbable that, with respect to both the standard of living and the remuneration of labour, the conditions existing prior to 1850 would have long remained without any great change for the better. In those days the standard of labour in England was the practical test of the condition of the working classes in Australia, who were thought well off simply because their earnings enabled them to enjoy comforts beyond the reach of their fellows in the Old World. Since the gold era this has been changed, and the standard now made for themselves by Australian workers has no reference to that of any other country. The attractions of the gold-fields had also a marked subsequent effect upon industries of an absolutely different character. Many men, of all sorts of trades and professions, who were drawn to these shores by the prospect of acquiring enough of the precious metal to ensure their independence, remained in the country, and pursued less exciting and less precarious callings, while gold-miners themselves in many cases ceased the exploitation of



the mineral which was to have made them rich, and turned their attention to the winning of silver, copper, tin, coal, and other minerals.

Another effect of the gold rush must not be lost sight of. Although Australia had ceased to be a place open to the reception of British convicts, yet the old settled parts were permeated with social and economic ideas begotten of the transportation era. The men who had been convicts, or who were born of convict parents, were a considerable element in the population, while the employers had, for the most part, at one period or other of their career, been masters of bond labour. A few years changed all this. It was as if Australia had been newly discovered. Certainly the country was recolonised, and the bond population and their descendants became a small minority of the population which every year made more insignificant, until at the present day it is only in out of the way corners that there is anything to remind the observer that any part of Australia was at one time a penal settlement.

The gold fever brought to Australia not only young, stalwart, enterprising men of great endurance, and capable of adapting themselves to almost any conditions of life, but also multitudes of others whose chief idea was that wealth could be acquired almost without exertion. Unable to endure the hardships of the digger's lot, without trade or profession, and capable of only the lightest manual labour, they mostly drifted back to the chief towns ; and there was speedily presented the strange spectacle of thousands of unemployed clamouring for government work, while the more stalwart labourers were earning extraordinary wages in the gold-fields.

At the height of the gold discovery the earnings of miners in some cases were prodigious. The Gold Commissioners of New South Wales estimated the average earnings of diggers to have been about £1 per day ; and a comparison of the gold yield with the numbers of licenses issued confirms this calculation. In Victoria the average was probably much higher, and a contemporary calculation fixes the earnings at £42 10s. per month for each miner licensed to dig. Making allowance for illicit digging, there seems ample proof that in the first half of 1852 the average of all miners could hardly have been less than 30s. per day. At one period 50,000 persons held licenses in Victoria and 31,000 in New South Wales ; and if allowance be made for the great number of persons who evaded payment of the license fee, the number of gold diggers could scarcely have been less than 100,000 in a total male population in Victoria and New South Wales of 229,562.

The effect of the discoveries on wages was immediate and extraordinary. Governor La Trobe of Victoria, in a despatch, under date 12th January, 1852, remarks on the difference in the wages payable immediately before and after the gold discoveries. The wages of shearers rose from 12s. in 1850 to 20s. in 1851 ; of reapers, from 10s. to 20s. and 25s. per acre ; of common labourers, from 5s. to 15s. and 20s. per day ; of coopers, from 5s. to 10s. ; of shipwrights, from 6s. to 10s. ; of wool-pressers, from 3s. 6d. to 7s. and 8s. per day ; sailors, from

£4 to £9 a month (from £50 to £100 being offered for the run to England); stokers, from £12 to £20 a month; men cooks, from 20s. and 25s. to £2 and £3 a week; waiters at hotels, from 20s. to 40s. and 50s. a week; ostlers and stable-men, from 21s. to 50s. a week; men servants in town, from £25 and £30 to £50 and £70 per annum, and none to be had even at these wages; men servants in the country, from £20 and £25 to £35 and £40; salesmen, shopmen, &c., from 25s. and 35s. to 40s. and 70s. a week; porters, from 12s. and 15s. to 25s. and 35s. a week; the increase in the wage of female servants was 25 per cent.; of clerks in banks and mercantile houses, 20 to 50 per cent.; but the figures given by the Governor denoted only the beginning of the advance in wages. Prices rose in response to the altered conditions. From December, 1850, to December, 1851, the prices of provisions, etc., had risen as follows:—Bread, 4 lb. loaf, from 5d. to 1s. 4d. and 1s. 8d.; butter, from 1s. 2d. to 2s. and 2s. 6d.; cheese, from 8d. and 1s. 4d. to 2s. and 3s.; fresh meat doubled; salt meat rose from 1½d. to 2½d.; ham, from 8d. and 1s. to 1s. 6d. and 2s. 6d.; bacon, from 6d. and 8d. to 2s. per lb.; fowls and ducks, from 3s. and 3s. 6d. to 5s. and 6s. a couple; potatoes, from 8s. to 12s. and 15s. a cwt.; tobacco, from 2s. 6d. and 4s. to 7s. and 8s. a lb.; groceries generally, 25 per cent.; vegetables, from 50 to 100 per cent.; spirits, wine, beer, etc., from 30 to 50 per cent.; confectionery, 50 per cent.; fruit, 100 per cent. The following are the percentage rates of increase on the prices of some of the supplies furnished under contract for the Government service of Victoria:—Candles, 60 per cent.; fresh beef, 33½ per cent.; salt pork, 25 per cent.; bread, 50 per cent.; tea, about 21 per cent.; sugar, 10 per cent.; soap, 20 per cent.; milk, 75 per cent.; new horse-shoes, 150 per cent.; cost of removing old ones, 350 per cent.; printing, 100 per cent.; saddlery, 75 per cent.; for boots and shoes no tender could be obtained. “Old furniture,” remarks the Governor, “sells at about 75 per cent. advance upon the former price of new. Scarcely any mechanic will work; those few who do, receive an advance on former wages of from 200 to 350 per cent.”

The condition of things just described may be looked upon as chaotic, but every month saw the prices of commodities and the remuneration for labour more systematised. As the gold discoveries continued, the wages continued to rise, but there was an essential difference between the conditions of 1851 and 1853. In the former year, men’s ideas of the amount of the wages they should receive were, on the one hand, tempered by the remembrance of the wages paid in England and in the colonies before the discovery of gold, and on the other they were excited by the boundless possibilities of easily acquired wealth which loomed before the successful digger, and their demands rose and fell according to the exigencies of the employer. In 1853 the condition of things became more settled. Wages on the average were higher than in previous years, but there was a recognised scale for the payment of the principal classes of labourers and mechanics. In 1853, carpenters, wheelwrights, and bricklayers received, in Melbourne, 15s. per day with

board and lodging; masons, without board and lodging, 26s. 9d. per day; bricklayers, 25s. per day; smiths and wheelwrights, 22s. 6d. per day. This would seem to fix the cost of board and lodging at about £3 10s. per week. In the following year the wages of wheelwrights reached 30s. per day; bricklayers, 30s. per day; but the pay of carpenters and other mechanics remained about the same. In the next table the wages given are those ruling in Sydney during the period named. It must be remembered, however, that in some instances the wages quoted were merely nominal, as, owing to the dearth of labour, there was a suspension of many trades which flourished before the gold discoveries, and prices quoted are those paid to the remnant who remained in town:—

Trade or Calling.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.
-------------------	-------	-------	-------	-------	-------	-------	-------	-------

*Males, per day, without board and lodging.*

	s.	d.	s.	d.	s.	d.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.						
Bricklayers .....	6	0	9	0	15	6	25	to	30	18	to	25	16	to	18	12	to	16	10	to	11	6
Blacksmiths .....	6	8	9	0	12	9	20	to	25	14	to	16	8	to	13	10	to	14	10	to	10	6
Carpenters .....	6	5	9	0	12	6	15	to	20	12	to	15	12	to	15	10	to	12	10	to	10	11
Coopers .....							15	to	20	10	to	12	12	to	14	12	to	14				
Cabinetmakers .....							15	to	20	12	to	15	12	to	15	12	to	14				
Farriers .....							12	to	15	10	to	12	9	to	12	10	to	12				
Plumbers and glaziers .....							16	to	20	12	to	15	12	to	15	12	to	15				
Joiners .....							17	to	20	12	to	15	12	to	14	12	to	15				
Ironfounders .....							16	to	20	14	to	16	12	to	14	11	to	13				
Locksmiths .....							18	to	22	16	to	18	12	to	15	10	to	13				
Quarrymen .....							18	to	21	16	to	18	12	to	15	14	to	16				
Shoemakers .....											14	to	22	12	to	14	10	to	12			
Wheelwrights .....	6	4	9	0	15	0	18	to	20	14	to	16	12	to	14	12	to	14	10	to	11	
Plasterers .....					16	0	25	to	30	14	to	16	13	to	17	13	to	15				
Painters .....							13	to	16	8	13	to	14	10	to	12	8	to	12			
Stonemasons .....	7	8	9	0	16	0	25	to	30			12	6	to	15	13	to	15	10	to	11	

*Females, per annum, with board and lodging.*

	£	£	£	£	£	£	£	£	£	£
Cooks .....	16	to	25	18	to	25	24	28	25	26
Housemaids .....	14	to	18	14	to	18	17	22	21	23
Laundresses .....	7	to	12	15	to	18	20	28	28	23
Nursemaids .....	9	to	15	16	to	18	17	18	18	26
General servants .....	14	to	18	16	to	18	18	28	23	19
Farm-house servants .....			13			14	15	25	22	25
Dairy-women .....			13			14	15	25	20	25

In Adelaide, from the time of the discovery of gold, wages were not only daily advancing, but some industries came to a complete standstill. In wheat farming, for example, it was impossible to procure white labour at all, and, as already remarked, settlers were glad to hire the aborigines to gather in their crops, and for this work they were paid at the rate of 10s. an acre. As mentioned elsewhere, Tasmania lost a large portion of its adult population to Victoria, but those who remained behind prospered exceedingly. Everything the island produced found a ready market and at highly remunerative prices.

Prices of articles of ordinary consumption in Victoria have already been alluded to. All over Australia the prices of provisions and of all articles of clothing were, during this golden era, largely increased; indeed, there was hardly a commodity in the market, whether of use or

of luxury, the price of which might not be described as "fancy." In 1853 bread sold in Sydney at  $3\frac{1}{2}$  to 4d. per lb. and potatoes at 13s. per cwt., but certain lines of provisions were fairly reasonable; for instance, tea was quoted at 1s. 4d. per lb., sugar at  $3\frac{1}{4}$ d., fresh meat at 3d., butter at 1s. 5d., brandy at 23s. per gallon, and imported beer at 5s. per gallon; flour, however, was quoted at 3d. per lb., the price per ton ranging between £20 and £27. House rents, of course, rose with the influx of population. In Melbourne, the sudden increase of population raised house rents to an unparalleled height, and for a considerable time a large proportion of the community lived in tents. This, of course, gave an extraordinary stimulus to building, and partly from this reason, and partly on account of the mercantile failures consequent on the over-trading of 1853 and 1854, the year 1855 witnessed a heavy fall in rents, so that in that year they did not exceed half the amount paid three years previously.

In Sydney, the number of persons requiring house room was so much in excess of the accommodation available in habitable dwellings that the census of 1856 enumerates no fewer than 709 houses as being in occupation although still in the hands of the builder. As illustrative of the exigencies of the time in this particular, it is interesting to note that out of 39,807 dwellings 1,709 were tents, 31 were drays, and 64 were ships used as residences. Of the total number of habitations in New South Wales, 23,709 were built of wood, and of such inferior materials as bark, slabs, wattle and daub, and the like, and 225 of iron, while more than one-third of the dwellings were roofed with bark and thatch. Owing to the dearth and dearness of skilled labour, a large number of houses were imported in pieces, ready to be put together with little or no carpentering work beyond making the foundations and driving the nails. Some of these were still to be seen in the vicinity of Sydney and other towns until within recent years.

The discovery of gold had an almost immediate effect in establishing Melbourne as the largest city of Australia, and Victoria as the most important state. The total trade of Victoria, New South Wales, and South Australia with places outside their boundaries during the eight years was as given in the following table. The preponderance of Victoria is evident.

Year	New South Wales.		Victoria.		South Australia.		Tasmania.		Western Australia.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imp.	Exp.
	£	£	£	£	£	£	£	£	£	£
1851	1,563,931	1,796,912	1,056,437	1,422,909	690,777	602,087	641,009	665,790	56,598	26,870
1852	1,900,430	4,604,034	4,069,742	7,451,549	798,811	1,787,741	860,488	1,509,833	97,304	24,181
1853	6,342,397	4,523,946	15,842,637	11,061,544	2,336,290	2,241,814	2,273,397	1,756,316	126,785	31,645
1854	5,981,063	4,050,126	17,650,051	11,775,204	2,147,107	1,322,822	2,604,680	1,433,021	128,260	34,109
1855	4,668,519	2,884,130	12,007,939	13,403,338	1,370,938	988,215	1,559,797	1,428,629	105,320	46,314
1856	5,460,971	3,430,830	14,962,269	15,489,760	1,366,529	1,665,740	1,442,106	1,207,802	122,938	44,740
1857	6,729,408	4,011,952	17,256,209	15,079,512	1,623,022	1,953,572	1,271,087	1,354,655	94,532	59,947
1858	6,059,366	4,186,277	15,108,249	13,939,209	1,769,351	1,512,185	1,328,612	1,151,606	144,932	78,649

The excess of the imports is very marked in the years immediately following the discoveries, and indicates the inflow of capital accompanying the immigrants who poured into the country from Europe and elsewhere. During the eight years included in the foregoing table the excess of arrivals over departures was at least 450,000, probably more; and if each of these immigrants brought with him not more than £25, their capital alone would represent £11,250,000. The imports comprised manufactured goods and articles of luxury, and the exports were almost exclusively gold and wool, and other raw material, the produce of the pastoral industry. As already mentioned, the product of the southern fisheries had greatly fallen off by the beginning of the period, and the export of oil, etc., averaged for five years between £25,000 and £30,000 per annum. In 1858 the exports of the fisheries had fallen to £1,450; in 1859 to £532; and in 1860 to £136. With the last-named year, the industry, around which cluster so many historical associations, and which is so peculiarly reminiscent of the early days of Australian settlement, practically disappears, although a few trifling essays have, from time to time, been made to revive it in southern waters, and small quantities of oil are still exported.

The actual export of gold from Australia cannot now be stated with exactness. The figures given in the following table show the exports in excess of the imports registered in the Customs houses, but doubtless there was a large export of which no account was rendered to the authorities, for, though the influx of population was great, the departures were also numerous, and every ship that left Melbourne carried with it more or less gold in the possession of returning diggers.

Year.	Net Export of Gold from—	
	Victoria.	New South Wales.
	£	£
1851	508,013	468,336
1852	6,912,415	2,660,946
1853	11,090,643	1,781,172
1854	9,214,093	773,209
1855	11,070,270	654,594
1856	11,943,458	689,174
1857	10,987,591	674,477
1858	10,107,836	1,104,175

The figures for Victoria are from the Customs returns, and in the earlier years are probably far below the actual amounts. Competent authorities estimate the yield of 1852 at fifteen millions, or about eight millions in excess of the official returns.

The foregoing table explains the tremendous attraction which the southern colony possessed for the population of the Australasian group. The imports into Victoria during 1854 were no less than £17,659,051; it is therefore easy to understand how it happened that, for a period, the parent colony was quite eclipsed by the growth of its own off-shoot, and that the commerce of the South Pacific gravitated to Melbourne. During a single month as many as 152 ships arrived in Port Phillip, conveying thither 12,000 immigrants.

Agriculture was greatly neglected during the days of the gold fever. In New South Wales about one-third of the area went out of cultivation, the acreage falling from 198,000 acres in 1850 to 131,000 acres in 1852; in Victoria there was a reduction from 52,000 acres to 34,000 in the same period; in Tasmania and South Australia there were also considerable reductions in the area cropped. The check to the industry was, however, only temporary, as the ultimate effect of the gold discoveries upon agriculture was extremely stimulating. In Victoria, especially, there was a great expansion. In 1853 the breadth of land cropped was 34,000 acres; in six years this had been increased to 419,000 acres. In 1857 the cultivated area in Victoria exceeded that of New South Wales by 50,000 acres, a superiority which was afterwards greatly added to and is maintained to this day.

The progress of agriculture in each state may be seen from the following figures:—

AREA UNDER CROP.

Year	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.
1850	198,056	52,341	64,728	7,419	168,820	491,364
1854	131,857	54,905	129,692	13,979	127,732	458,165
1858	223,295	298,960	264,462	20,904	229,489	1,037,110

The principal crops grown were wheat, oats, potatoes, and hay, chiefly wheaten and oaten; but there were signs of attention being paid, especially in Victoria and Tasmania, to fruit-growing and other forms of culture requiring less land and more labour.

The influence of the gold discoveries on the pastoral industry was twofold—on the one hand retarding its development by depriving it of labour, and on the other, encouraging it by the creation of a demand for carcase meat. Before the discoveries, fat sheep sold in the Melbourne market at 10s. to 12s., in 1852 the price was 30s., and higher prices were subsequently obtained. During the whole period the value of the

carcase steadily gained on that of the wool, and it is not surprising, therefore, that the increase of the flocks was arrested. This was especially the case in Victoria, where the number of sheep depastured fell from 6,589,923 in 1851 to 4,577,872 in 1855. In New South Wales the number of sheep fluctuated according to the requirements of the southern districts, but there was no tendency for the flocks to increase. In 1859 the number of sheep depastured fell to 5,162,671, or three millions below the figures of some previous years, a result brought about by the demand for restocking in Victoria, and the opening up of new country in Queensland.

In the first years of the colony's history the coastal belt only was available for settlement, but with the crossing of the Blue Mountains, in 1813, a new horizon stretched before the pastoral imagination, and with each successive discovery by Oxley or Cunningham or Mitchell or Hume, plain was added to plain of pasture, and the paths of the explorers were dotted with chains of squattages. In the earliest years of pastoral settlement it was customary for stock-breeders to drive their herds to the nearest unoccupied good country when they increased beyond the grazing capabilities of their pasturages. In this manner the river-courses in the western districts became stocked, and the country bordering them occupied. The practice came into vogue when cattle were decreasing in value, and when, therefore, it was absolutely necessary to breed them at the least expense. These herds were, however, inferior in strain. They frequently became wild and unmanageable, and it was only with the influx of population during the gold fever days, when high prices were paid for meat, that they acquired any value. The cattle, nevertheless, showed that the interior country was good for stock-grazing, and proved that land which had hitherto been regarded as a desert was very fattening pasture; for they had discovered "salt-bush," a fodder plant which retains its vitality when other kinds of herbage have long withered away. The grazing value of the river country, or Riverina, has never since been challenged.

There were in effect three great waves of pastoral settlement which swept over Australia. The first is that just alluded to, which flowed over the inland plains between the colonies of New South Wales, Victoria, and South Australia. The second rolled farther north, and beyond the occupied country, as far as the central basin of the continent. The third went still northward to the downs of Queensland. The first migration of stock arose from the demands for meat made by the gold-diggers. The success of this pioneer movement inspired the second experiment, which was prompted by the demand for wool. The third essay in pastoral settlement was occasioned by the maintained and increasing value of all squatting property.

The first of these migrations alone concerns the industrial history of the gold period, and began immediately the first fever of discovery had abated, and was the chief factor in producing the agrarian agitation which marked the following decade.

The following is a statement of the values of the chief articles of pastoral produce exported in the years named :—

Year.	Wool.	Tallow and Lard.	Skins and Hides.
	£	£	£
1851	1,979,527	237,402	32,284
1855	3,170,640	152,376	69,602
1859	4,236,693	48,085	271,349

The actual number of stock depastured in Australia was as follows:—

Year.	Sheep.	Horned Cattle.	Horses.	Swine.
1851	17,515,798	1,924,482	167,220	109,911
1852	18,002,140	2,075,256	186,092	132,093
1853	17,191,146	2,141,526	183,360	123,033
1854	17,249,581	2,256,639	208,133	112,062
1855	17,065,979	2,697,390	231,056	131,431
1856	16,193,035	3,054,592	262,448	212,582
1857	17,091,798	3,180,042	289,027	217,352
1858	17,205,653	3,217,600	332,381	196,636
1859	15,443,617	3,275,850	353,388	245,367

Upon the manufacturing industry the first effect of the gold rush was disastrous; but there was an immediate change, especially in Victoria, where the camps of the diggers soon became thriving towns. It was to the population attracted to the country by the gold discoveries that the manufactories owed their subsequent revival and the labour required to operate them. The statistics of these states are not complete enough to enable a statement of the progress of the manufacturing industry to be given; but it is evident, from the rapid increase, after the year 1855, in the number and variety of establishments, that the ultimate effect of the gold discoveries upon the manufacturing industry was extremely stimulating.

Reference has already been made to the opening up of steam communication with England in 1852, during which year the "Chusan," the "Australia," and the "Great Britain"—the last-named the largest ship afloat at that time—visited Australia. In 1856 a steam service, of anything but a satisfactory character, was carried on by the Peninsular and Oriental Company and the Royal Mail Company; but the days of efficient ocean communication were still to come. These early essays, however, had no small effect in encouraging the colonists to agitate for something better, and proposals were made for the establishment of a line of mail-packets *via* Panama, but they did not bear fruit until the year 1866.

The history of railway construction is elsewhere dealt with. It was not until 1846 that the people of Australia began to awaken to the



advantages of railroad communication, and not until two years afterwards that a company was formed to construct a railway from Sydney to Parramatta and Liverpool. This line was commenced in 1850 and partly completed in 1855. Meanwhile, the discovery of gold had been made, and attention was directed to railway construction in Melbourne, and in 1854 the first line in Australia was opened for traffic; it ran from Melbourne to Port Melbourne, and was  $2\frac{1}{2}$  miles long. For some years railway construction languished, the enthusiasm of its advocates being doubtless considerably damped by the reflection that the short line from Sydney to Parramatta—only 14 miles in length—cost £700,000, or £50,000 a mile. The progress of railway construction is shown by the following figures, which give the length of line open for traffic in the years named :—

Years.	Miles.	Years.	Miles.
1854 .....	2 $\frac{1}{2}$	1857 .....	117
1855 .....	16 $\frac{1}{2}$	1858 .....	132
1856 .....	32 $\frac{1}{2}$	1859 .....	171

With steam communication to other parts of the world, and the introduction into Australia of the railway system, new markets were being created for the trade in coal, although it was not before the subsidence of the gold fever that they began to be availed of. The quantity of coal raised in 1852 was 67,404 tons, and in 1858 over three times as much, viz., 216,397 tons. In 1850 and 1851 the price of coal ranged from 9s. to 10s. per ton; in 1852 it had risen to over 80s. per ton, although it did not remain for an extended period at this high figure. The quantity and value of the production of this mineral during the period under review were as follow :—

Year.	Quantity raised.	Average price per ton.	Approximate total value.
	tons.	s. d.	£
1852	67,404	10 11	36,885
1853	96,809	16 2	78,059
1854	116,642	20 6	119,380
1855	137,076	13 0	89,082
1856	189,960	12 5	117,906
1857	210,434	14 1	148,158
1858	216,397	15 0	162,162

The whole of this coal was mined in New South Wales.

During the whole of this period considerable activity was shown in testing the navigable waters of the Continent, and repeated efforts were

made to open up communication by way of the rivers Murray and Darling, which, of course, had a corresponding influence on the great pastoral industry by affording means of cheap transit for the leading staple of the interior. In 1853, W. R. Randall, in his small steamer, the "Mary Anne," was the first to proceed up the Murray, and eventually he reached Maiden's Punt, as the crossing from Echuca to Moama was then named. In the same year Captain Cadell proceeded in a steamer up the Murray to near Albury "with the greatest ease and success." This voyage attracted marked attention, and was the cause of the inauguration of regular steam-service on the river. Captains Cadell, Johnson, and Robertson, and Mr. Randall, subsequently followed up the original essays in the direction of inland river navigation by steaming up the courses of the Murrumbidgee, the Darling, the Barwon, and the Edwards, thus making accessible to population, and opening up to the wool-growing industry, an enormous expanse of territory. In the north, A. C. Gregory (in search of Leichhardt), Dalrymple, and other explorers, were successively unlocking to the squatters, who followed closely in their wake, the broad areas of pasturage, whose almost immediate occupation advanced the northern congeries of squatting localities, known as the Moreton Bay District, in rapid strides to the dignity of the Colony of Queensland. It is noteworthy, and distinctly characteristic of the period, that by the year 1854 the purchase of land for agricultural purposes had almost ceased, territory being taken up instead in large tracts by pastoral lessees for grazing purposes.

The population of Australia in 1850 was 480,120; in 1855 it had risen to 821,452, and in 1860 to 1,141,563. The tendency to crowd into the cities was already visible; in 1861 Melbourne held 139,916 people, and Sydney 95,789, or together 235,705, a total representing one-fifth of the population of the continent.

#### INDUSTRIAL PERIOD—1859-62.

The three years, 1860-62, may be regarded as a transition period, during which the country was undergoing the process of recovery from the days of excitement and dreams of chance, when the wealthy speculator of one moment became the beggared adventurer of the next, and the outcast of many years the millionaire of as many months. The community was vaguely restless, as though beginning to realise that the golden era of its recent experience was drifting into a prosaic period of sterner conditions and slower and more arduous growth. There were many, however, still in the daily expectation of hearing of new discoveries as rich as those of the previous decade, and these refused to accept the conditions of settled industry, while the rumour of a new find was sufficient to entice them away from the employment they clanced at the time to be following.

The production of gold in 1859 was nearly ten and a half millions, of which one and a quarter million was from New South Wales, and the

balance from Victoria. The following was the yield during the four years embraced in this period :—

Year.	Victoria.	New South Wales.	Other Districts.	Total.
	£	£	£	£
1859	9,122,868	1,259,127	730	10,382,725
1860	8,626,800	1,465,373	.....	10,092,173
1861	7,869,812	1,806,171	.....	9,675,983
1862	6,633,124	2,467,780	12,442	9,113,346

It will be seen that, in spite of the improvement in New South Wales, the total gold won was steadily declining. The earnings of the working miner were diminishing in even a greater ratio than the foregoing figures indicate, with the natural and immediate result that there was a return of gold-seekers to their original or other pursuits. Agriculture naturally received more attention, but many successful miners made investments in squattages, and both for farming and grazing there arose a persistent demand for the acquisition of state lands on more equitable terms than had hitherto prevailed in Victoria and New South Wales.

The renewal of attention to agrarian pursuits was general throughout Australia. Victoria and South Australia had about equal areas under tillage, although the value of crop was, perhaps, greatest in the first-named. Victoria had benefited most by the gold discoveries, both directly and indirectly, and was now in all important respects the leading state. It was the chief financial centre, and had the largest population, trade, acreage under tillage, and mining yield, as well as a larger number of sheep, and perhaps sheep of a better class than possessed by any of its neighbours. New South Wales stood first in regard to the possession of cattle and horses; Queensland and South Australia had already large interests in live stock, especially in sheep and cattle; and Tasmania depastured more sheep than it does at the present time, while the number of cattle and horses in the state was considerable. The following were the numbers of stock of each class at the close of the year 1862 :—

State.	Sheep.	Cattle.	Horses.
New South Wales .....	6,145,651	2,620,333	273,389
Victoria .....	6,764,851	576,601	86,067
Queensland .....	4,553,353	637,296	36,532
South Australia .....	3,431,000	258,342	56,251
Western Australia .....	295,666	36,887	12,099
Tasmania .....	1,616,225	83,143	20,742
Total .....	22,806,746	4,212,652	485,080

The area under crop at the close of the year 1862 was 1,549,255 acres. In South Australia the acreage was 494,511; in Victoria, 465,430; in New South Wales, 302,138; and in Tasmania, 253,050. The beginning of an important industry was made in Queensland, though the area in crop was only 6,067 acres, while in Western Australia the cultivated area was 28,059 acres. The importance already assumed by South Australia is very noticeable, and from this period that state and Victoria continued to make, for twenty years, rapid and almost equal progress, until in 1892 the superiority in agricultural interests fell to Victoria, where it has remained. Although New South Wales had many advantages over the southern states, its agricultural progress was astonishingly slow; in point of fact, its position was little in advance of Tasmania so far as concerned acreage, and probably below it in point of value.

The permanent effect of the gold discoveries on the industries of Australia is best seen in the trade returns, and especially in the figures relating to exports. In 1850 the total value of exports from Australia was £3,584,000; in 1856, when the gold production was at its height, the value was £21,794,000; in 1861 it was £23,166,607; and thereafter the figures showed a constant tendency to increase. The phrase that the gold discoveries "precipitated Australia into nationhood" is no poetic exaggeration, but an actual fact.

The progress made in railway construction during this period was far from satisfactory. The Governments of the different states were not wanting in enterprise, but it was difficult to obtain money at a rate of interest sufficiently low to warrant them in borrowing; and even if loans at moderate rates could be raised, the prospect of sufficient traffic being obtained to make the railways pay was not assured. In 1862 the length of line open for traffic was 368 miles, viz., 214 miles in Victoria, 98 miles in New South Wales, and 56 in South Australia.

Allusion has been made to the demand for land which set in after the more easily worked gold deposits had been exhausted and erstwhile gold-seekers were compelled to look round for other means of livelihood. The beginning of the sixties marks the inception of the agrarian legislation and agitation for cheap land that has persisted in every state to the present day. New South Wales led the way by passing a law, under the provisions of which land was obtainable by free selection before survey. Sir John Robertson's Land Act—the measure referred to—came into operation in 1861, and the new principle it initiated had lasting, if not immediately apparent, effect on the condition of the working classes, giving them opportunities for employment not previously open to them. The main principle of the measure, which did so much to assist recovery from the dead level of conditions that prevailed at the time, is embodied in the following clause:—"Any person may, upon any Land Office day, tender to the Land Agent for the district a written application for the conditional purchase of any such lands, not less than 40 acres nor more than 320 acres, at the price of 20s. per acre,

and may pay to such Land Agent a deposit of 25 per centum of the purchase money thereof. And, if no other application and deposit for the same land be tendered at the same time, such person shall be declared the conditional purchaser thereof at the price aforesaid."

The free selector of any portion of Crown lands had three years' credit for the payment of the remainder of his purchase-money. Should he, after that time, be unable or disinclined to make payment, liberty was granted him to defer instalments for an indefinite period on paying 5 per cent. interest per annum on the principal amount remaining unpaid. It was also provided that the purchaser of any area of land from 40 to 320 acres should be entitled to three times the extent of his purchase for grazing ground, so long as it should not be claimed by any other free selector. Certain conditions were imposed regarding residence, which came to be more honoured in the breach than in the observance.

No other state dealt so lavishly with its waste lands as did New South Wales. The amendments made by Victoria were more cautious, and it was not until 1869 that the principle of free selection, as in vogue in New South Wales, was adopted. The pressure of population from abroad was not so great in Tasmania, South Australia, and Western Australia as to compel agrarian legislation of a revolutionary character, and in each of these states the amendments in the law, though frequent, were such as to conserve the public estate. In the period under review Queensland was only beginning its career as an independent state, and having a vast territory to dispose of, which did not offer the same attractions as were offered by the southern provinces, its land legislation was marked by extreme liberality to the intending settler.

The period 1859-62 was peculiarly one of transition so far as wages were concerned; there were no recognised trade rates, and even in the same year there were occasional variations, sometimes as many as four in the daily wages of artisans. An example of this may be given for the year 1861. In that year the daily wages of masons working in Melbourne fell from 14s. in April to 13s. in July and 12s. in October, and the wages of bricklayers were, in the same months, 12s., 11s., and 10s. per day. Other trades were somewhat similarly affected. The following were the current wages in the closing months of the years named, in Melbourne and Sydney:—

Trade or Calling.	1860.		1861.		1862.	
	Melbourne	Sydney.	Melbourne	Sydney.	Melbourne	Sydney.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Masons .....	14 0	11 6	12 0	10 0	10 0	10 0
Plasterers .....	11 0	10 6	10 0	11 0	8 0	10 0
Bricklayers .....	12 0	10 6	10 0	11 0	8 0	13 0
Carpenters .....	11 6	10 6	10 0	10 0	8 0	10 0
Blacksmiths .....	11 0	10 6	10 0	10 0	10 0	10 0
General Labourers .....	7 6	6 0	6 0	6 0	5 6	6 0
	per week.	per week.	per week.	per week.	per week.	per week.
General Servants (female)	10 0	8 6	11 0	9 0	12 0	10 0

The wages of female servants were in addition to board and lodging. The figures just given mark the transition from the high rates of the gold-discovery period to those payable under modern conditions. There was, naturally, considerable reluctance on the part of wage-earners to accept the new conditions, and there was considerable fluctuation in wages before a distinct understanding was arrived at between employers and employed.

The prices of commodities fell with the decline in wages, although not to so great an extent, but rents were adjusted to the new conditions. It is not easy to give average prices in each part of Australia at this period; for, although price lists are available, it is difficult, if not impossible, to be certain that the goods mentioned therein are identical with those quoted in similar lists for other places. Speaking generally, the prices of agricultural and dairy produce were lower in Melbourne than in Sydney; agricultural produce was also of lower price in Adelaide than in Sydney. Beef and mutton were cheaper in Sydney than elsewhere. Imported goods were, on the whole, of lower price in Melbourne than in the other capital cities—that is to say, in the retail shops,—the wholesale prices being much the same. The following are the average prices of some of the principal articles of consumption in the retail shops of Sydney during the year named :—

Article of Consumption.	1860.	1861.	1862.
	s. d.	s. d.	s. d.
Wheat, per bushel .....	8 0	6 6	7 0
Bread, 1st quality, per lb.....	0 3½	0 4	0 2½
Flour, „ per lb.....	0 3½	0 3	0 3
Rice, per lb. ....	0 5	0 4	2d. to 4d.
Oatmeal, per lb. ....	0 6	0 6	0 5
Tea, per lb. ....	2 3	2 4	1/6 to 2/6
Coffee, per lb. ....	1 6	1 6	1/4 to 1/6
Meat, fresh, per lb. ....	0 4	0 3	0 4
Butter, fresh, per lb. ....	1 6	1 8	2 3
Cheese, English, per lb. ....	1 6	1 7	1 6
Potatoes, per cwt. ....	7 6	7 3	8 0

#### INDUSTRIAL PROGRESS—1863-1872.

During this period of Australia's history the industrial and social conditions now obtaining were gradually evolved. The El Dorado dreams of ten years before almost entirely faded from men's minds, and although large discoveries of gold were made both during this period and afterwards, the impulse towards gold-seeking never again became a dominating passion amongst any large class in the community. All the states had, owing to the increased demand for freehold land consequent upon the large influx of population at the time of the gold discoveries, altered their laws with the avowed object of affording men of small

means the opportunity of acquiring land on easy terms, and in the ten years following the passing of the Robertson Lands Acts 11,260,547 acres were disposed of by the six Australian states. Victoria sold 3,607,791 acres, New South Wales 3,969,273 acres, South Australia 2,250,552 acres, and Tasmania 542,061 acres.

It is interesting to note that, taking Australia as a whole, about one-eighth of the land sold by the states was placed under cultivation. The proportions, however, were very different in the different states. In Victoria, it was about one-seventh, in South Australia one-fourth, while in New South Wales it was less than one-thirtieth. These proportions give an indication of the lines upon which the states were progressing. Victoria and South Australia were becoming important agricultural communities, Tasmania was developing grazing and agriculture together, while New South Wales, neglecting agriculture, paid more and more attention to sheep-farming. Gold-mining still maintained a position of great importance in Victoria, but even in that state, at the middle of the period, the industry, measured by the value of its production, ranked below both agriculture and stock-rearing. In 1866 Queensland appears for the first time as a gold producer, and small quantities were obtained in South Australia and Tasmania. The value of the gold exported from Australia in 1859 was £10,382,725; in 1866 it had fallen to £7,108,667.

During this period the coal-mining industry of New South Wales was beginning to obtain some importance. In 1858 the quantity of coal raised barely exceeded 100,000 tons; in 1862 it reached about 300,000 tons; and from 1866 to the end of the period the quantity varied from 500,000 to 600,000 tons.

South Australia was helped very much by its copper industry. In the days preceding the gold discoveries the value of copper won did not fall far short of £400,000. The immediate effect of the gold discoveries, as already indicated, was to deprive South Australia of its able-bodied men, especially its miners. By 1854 the value of copper won had fallen below £100,000. With the subsidence of the first excitement of the gold discoveries, labour again returned to the province. In 1856 the output reached £400,000, and remained between that figure and £450,000 up to the year 1861. From 1861 onward the industry received considerable impetus, and the output in 1866 reached the large total of £824,000. Although the following years do not show so valuable a production, the output declining in 1868 to £624,000, the actual quantity of copper won had not diminished, the fall being due to a decline in the price of the metal.

The climatic conditions of the period in some of the states were not such as to encourage the progress of rural occupation. This was especially the case as regards New South Wales. The year 1862 was one of drought and bush fires. The drought persisted till February, 1863, and was succeeded by heavy rains which deluged the eastern portion of the continent. Floods were recorded from Rockhampton on

the north to Gippsland on the south, and in the Hawkesbury Valley the water rose 27 feet above its normal level. In New South Wales the floods were succeeded by a long spell of dry weather, which lasted into the opening month of 1865. Farmers petitioned the Government to be released from claims for seed-wheat advanced during the previous year; crops in many parts of the interior were totally destroyed by rust and drought, and in the north by continued rain—for floods were again submerging many districts,—and efforts were being made to provide accommodation for the houseless poor. The floods, which covered a period of six months, extending from February to July, caused rivers to overflow their banks, swept bridges away, and destroyed a vast amount of property. The year 1866 was normal as regards the seasons, but unsettled conditions again prevailed in 1867. In this year the floods were attended by loss of life as well as by destruction of property. Lines of railway were closed in consequence of the heavy rains, and public works in some districts were greatly damaged. The distress of the settlers who had been “washed out” called so loudly for relief that public meetings were held for the purpose of raising subscriptions. The Colonial Secretary and others hastened to the inundated districts with succour, and the butchers and bakers of Sydney sent meat and bread to those who had been rendered destitute. Dry weather supervened from October, 1867, to January, 1868, followed by heavy rains which inundated the valleys of the Hawkesbury and the Hunter. The year 1869 began with a severe drought, and the 13th February was proclaimed by the Government a day of humiliation and prayer for rain. The pastoral industry was severely affected, and the whole country suffered. In 1870 floods prevailed throughout the state; traffic was stopped and much property destroyed. A Flood Relief Committee was formed, and, notwithstanding the presence of many unemployed in Sydney, great efforts were made to send succour to the “washed-out” settlers. The month of November in this year was specially fraught with disaster from floods. The calendar was simply a record of inundations which were general throughout the state.

The effect of the vicissitudes of the seasons is seen in the returns of the acreage cropped in the states chiefly affected. In New South Wales, from 1861 to 1864 the increase of cultivation was barely 20,000 acres; there were large increases in the two succeeding years, but the area was not retained in cultivation, and the year 1871 showed less tillage than 1866. From 1861 to 1865 the seasons in Victoria were on the whole adverse to the farmer, but subsequent years up to the end of the period under review were distinctly favourable. Tasmania is not subject to adverse seasons, but from 1861 to 1865 the climatic conditions were such that no progress was made as regards area under crop. In Queensland little progress is observable up to 1865, in which year the area cropped did not exceed 15,000 acres. Contrary to the experience of the eastern states, South Australia enjoyed a succession of fair seasons, interrupted by a few that were exceptionally good, and the area devoted



to tillage made regular progress, being checked only in one year (1868) of the period between 1861 and 1871. As will be seen from the table in regard to acreage under crop, the position of South Australia was higher even than that of Victoria. The following is a statement of the area cropped in each state in the years named :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total. Commonwealth States
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
1861	260,798	439,895	4,440	486,667	27,018	163,385	1,382,203
1866	451,225	592,915	24,433	739,714	43,159	167,866	2,019,312
1871	417,801	937,220	59,969	1,044,656	58,324	154,445	2,672,415

The progress of the sheep-breeding industry was continuous up to the year 1868, the seasons which proved so adverse to the farmer being, on the whole, favourable to the grazier; but from 1868 to 1871, which were good farming years, the seasons were against sheep rearing. The most important economic change observable in the period is the reversal of the positions of New South Wales and Victoria. In 1865 the number of sheep depastured in Victoria exceeded that of New South Wales by about three-quarters of a million; in 1871 the superiority was with the last-mentioned state to the extent of six and a quarter millions. The following is a statement of the numbers of sheep and cattle depastured in the years named :—

State.	Sheep.			Cattle.		
	1861.	1866.	1871.	1861.	1866.	1871.
New South Wales....	5,615,054	11,562,155	16,278,697	2,271,923	1,771,809	2,014,888
Victoria .....	6,239,258	8,833,139	10,002,331	628,092	508,968	799,509
Queensland .....	4,003,381	7,278,778	7,403,334	560,196	919,414	1,168,235
South Australia ....	3,038,356	3,911,600	4,412,055	265,434	123,820	143,463
Western Australia ..	279,576	481,040	670,999	33,795	41,323	49,593
Tasmania .....	1,714,498	1,722,804	1,305,489	87,114	88,370	101,540

In spite of the large fall in the gold returns, the exports of the states increased considerably during the period. There was a steady improvement in the quantity of wool and other pastoral produce exported, and the prices obtained were well sustained. Victoria held the first place in regard to the value of the trade, both of imports and exports, although at the end of the period its advantage over the mother state was very greatly reduced. It was in this period that Victoria adopted the policy of Protection, which, in subsequent years, it strictly adhered to, though that policy was not adopted without a severe legislative struggle. The

customs tariff of February, 1867, imposed duties on a number of articles with a view of affording protection to native industries, and four years later (May, 1871) the duties were increased upon many articles with the view of affording further protection.

The position of Melbourne at the end of the period under review was undoubtedly imposing. The population, 206,780, was far greater than that of any other city in Australia, its nearest rival, Sydney, having a population of only 137,776. But Melbourne's superiority was founded on a stronger basis than that of mere population. Early in the sixties the city became the financial centre of Australia. The enormous sums won at the gold-fields were poured into its banks, and filled their coffers to repletion, and fields for investment were eagerly sought after. The Riverina district of New South Wales first attracted attention, and speedily became the property of Melbourne residents, either absolutely or by way of mortgage. From New South Wales their enterprise extended to Queensland and across the sea to New Zealand, until Melbourne was without a rival in the field of Australian finance. The gradual working out of the gold-fields did not alter Melbourne's position. The gains derived from its investments, and the profits flowing to it as the financial centre of the continent, were greater even than those flowing from the gold-fields in the days of their highest production.

The position acquired by Melbourne was not at the expense of Sydney. It is true that the latter was the chief seat of Australian enterprise in the days preceding the gold discoveries; but it lost nothing by those discoveries, although its position was now second to Melbourne.

The climatic disturbances affecting New South Wales have been alluded to; but it must not be supposed that no progress was achieved during the period. Agriculture, it is true, made only slight advance, and no beginning had yet been made of manufacturing on a large scale, but the great pastoral industry had thriven, in spite of adverse seasons, and Sydney, on its part, had greatly benefited thereby. The stoppage of immigration was severely felt in some of the industries of the state, and immigration lecturers were sent to England to attract attention to the resources of New South Wales. There was, as is frequently the case in Australia, a demand for labourers in some pursuits in excess of the supply, while there was a dearth of employment in other branches of industry. All the trades connected with the pastoral industry were fully employed; those connected with the building industry, depending for their expansion upon an increase of population, were in a very different condition, especially in Sydney. In 1866 there was very keen distress amongst mechanics; and the Government of the state established relief works at Haslem's Creek, where considerable numbers of men were employed clearing and forming a large area to serve as a cemetery. Later in the same year rumours of rich gold discoveries in the Weddin Mountains attracted many of the workers away from the city, and so relieved the tension of the labour market. Queensland was troubled about the same time with a large

number of persons willing to work, for whom no employment was available; but the Queensland difficulty differed from that of New South Wales, both as to its origin and the class affected. The want of employment arose from a neglect of the ordinary canons of good government. It was the credit of the Government that was impaired, general business remaining unaffected. A brief description of the position of affairs at this period will be found in the historical sketch of Queensland in the early part of the volume for 1901-2. The persons who felt the crisis most acutely were the unskilled labourers discharged from public works by reason of the inability of the Government to pay its way. A return to the principles of sound finance, which of course was not accomplished in a moment, removed the cause of the crisis and with it the labour difficulty.

Wages for like employment were fairly level throughout Australia during the whole period, the tendency being for the rate for skilled tradesmen to fall to 8s. per day, and that for general labourers to 5s. per day. The following tables show the wages in some of the principal mechanical trades, and for day labourers and general servants, paid in 1861 and 1871 in the cities of Melbourne, Sydney, Adelaide, and Hobart. It will be seen that a considerable range is shown for most of the rates paid in Melbourne. There were two reasons for this: First, there was a greater range in the quality of the workmen than in the other cities; and, secondly, the Melbourne artisan resisted the inevitable fall in wages more strenuously than did his fellows in the other cities.

Class of Workers.	1861.				1871.			
	New South Wales.	Victoria.	South Australia.	Tasmania.	New South Wales.	Victoria.	South Australia.	Tasmania.
	s. d.	s. s.	s. d.	s. d.	s. d.	s. s.	s. d.	s. d.
Carpenters .....	10 0	8 to 10	9 0	7 0	8 6	8 to 10	8 0	6 6
Blacksmiths ...	10 0	8 to 12	10 0	9 6	8 6	8 to 10	8 0	6 6
Bricklayers .....	13 0	8 to 12	10 0	8 6	9 0	8 to 10	8 0	6 0
Masons .....	10 0	8 to 12	9 0	7 9	8 6	8 to 10	8 0	6 6
Day labourers ...	5 6	5/7	6 0	7 0	5 0	5/-	5 6	4 0

The lower rates shown for 1871 were not accepted without demur and meetings were held at various places to protest against the reduction in wages; but protests were unavailing when there were large numbers of qualified men unable to obtain employment even at the rates objected to.

The ratio of wages of female servants was well maintained during this period, the slight fall observable in 1866 being more than recovered. Farm labourers and shepherds suffered a slight reduction in wages towards the end of the period, as large numbers who had quitted their employment on the sheep and cattle stations for the gold-fields returned

to their former pursuits. The following are the weekly wages, the rates being in addition to board and lodging provided by the employers :—

	1861.		1866.		1871.	
	s.	d.	s.	d.	s.	d.
Farm labourers .....	13	0	11	6	10	9
Shepherds.....	13	0	13	0	11	9
Cooks (female).....	11	0	10	0	11	6
Housemaids.....	9	0	9	0	9	0
Laundresses.....	11	0	10	0	10	9
Nursemaids .....	8	0	7	0	8	0
General servants (female).....	10	0	9	0	9	0
Farm house-servants and dairywomen ...	8	6	9	0	9	0

The year 1861 is notable in labour matters, as witnessing a crucial stage in the agitation against the admission of the Chinese to Australia—an agitation which for many years has been an important factor in determining the trend of domestic and industrial legislation. The discovery of gold brought to Australian shores great numbers of these aliens. In 1852 they began to arrive, for prior to that year their presence, except at the seaports, was practically unknown. Victoria was the first place of settlement chosen by them. Although their number at the census of 1854 was not greater than 2,000, the local Legislature took alarm, and passed an Act limiting the number of Chinese to be brought into the country to one for every 10 tons of a vessel's cargo. Five other Acts were passed between 1855 and 1864, regulating the influx of these Asiatics. In 1856 the number in Australia was 26,000, and of these 24,000 were in Victoria, the rest being in New South Wales. In 1859 the Chinese inhabitants in New South Wales and Victoria numbered 37,000, or about  $4\frac{1}{4}$  per cent. of the population. The Chinese were almost wholly adult males, and if this number be compared with the adult male population of the two states it will be found that the proportion in the year named was not less than  $11\frac{1}{2}$  per cent. Victoria had the largest share of these aliens. In 1861 there were about 38,000 Chinese in New South Wales and Victoria, viz., 12,988 in the first-named, and 24,732 in the latter state. Thenceforward the Chinese population of Victoria rapidly declined, and the majority of those leaving crossed the Murray into New South Wales.

The arrival of Chinese was at no time viewed with equanimity by the whites; but with large numbers of disappointed gold-seekers in the country there was a growing feeling of resentment, and in 1861 matters in regard to this class of immigration reached a crisis. The gold-field opened up at Burrangong, in New South Wales, proved extraordinarily rich; a great rush set in to that place, and large crowds of the Chinese flocked to the diggings there. The miners received this influx of Asiatic fossickers with very bad grace, and convened a public meeting for the purpose of deciding whether "Burrangong was a European or a Chinese territory." They likewise addressed a petition to the Assembly, complaining of the swamping of the field by thousands of Chinese. This agitation against the alien miners resulted in continuous riotings. The unfortunate foreigners were ejected from their claims, their tents were

burned, and they were generally ill-used. The Government, determined to uphold order at any cost, despatched to the scene of the riots—a place called Lambing Flat—a mixed force of artillerymen, with two 12-lb. field-pieces, some men of the 12th Regiment, and some members of the mounted police force. The Premier, Mr. (afterwards Sir) Charles Cowper, also visited the field and addressed a monster meeting of the miners, sympathising with their grievances, but informing them that no redress could be obtained until riot and confusion had entirely ceased. When the Premier had returned to Sydney the excitement rapidly ceased. A new rush to a locality named Tipperary Gully lured away 6,000 miners from the scene of their former disputes, and the Chinese departed to other fields. Thus ended the first labour conflict between the Europeans and the Chinese, who from that date onward became a growing menace to the character of the settlement of the Australian States.

At the beginning of the period a Select Committee was appointed by the Parliament of New South Wales to inquire into and report upon the state of the manufacturing and agricultural industries. On the 12th December, 1862, this Committee brought up a report which stated that, from the evidence taken, it was shown that manufactures had not increased during twenty years; that many which had flourished in the past were not in existence; and that in consequence thousands of youths were wandering about the streets in a state of vagrancy, instead of learning some useful trade. This statement is, however, too sweeping to be accepted literally, and is not supported by any evidence of value. It may be taken, however, as indicating the popular opinion of the day, and perhaps as a tribute to the superior condition of affairs on the Victorian side of the Murray and in South Australia. The slight progress made in agriculture in New South Wales, and the more rapid development of Victoria and South Australia, have already been noticed. In regard to manufactures, none of the states could claim a strong position. If there were nothing else against the manufacturers, there was the absence of a local demand for the products, without which the maintenance of industries in their early stages is always difficult, and sometimes impossible. Owing to the imperfection of the statistics it is impossible to speak with exactness of the amount of employment afforded by the manufacturing industries of 1861. So far as the records now existing enable an estimate to be made, the persons employed in the year 1862, in what are now classified as manufacturing industries, were:—

New South Wales.....	12,225
Victoria .....	6,405
Queensland.....	4,966
South Australia.....	5,066
Western Australia .....	373
Tasmania.....	3,372

The chief industries in New South Wales were the grinding or dressing of grain, sugar-making, distilling, and boat-building. In

Victoria, flour and grain mills gave employment to 552 persons, no other industries being on a like scale. In 1871 a very considerable change is observable. Victoria is no longer a minor state, and as regards manufactures it is in every important respect superior to New South Wales. It is still difficult to speak with certainty as to the number of persons employed, but the following may be taken as a fair approximation:—

New South Wales	...	...	...	...	13,583
Victoria	...	...	...	...	19,569
Queensland	...	...	...	...	5,518
South Australia	...	...	...	...	5,629
Western Australia	...	...	...	...	414
Tasmania	...	...	...	...	3,747

In Victoria the largest employment was afforded by breweries, clothing factories, saw-mills and joinery works, boot factories, tanneries, iron foundries and engineering establishments, and potteries and brick-works; but there were many others of growing importance. In New South Wales the industries on the largest scale were tobacco factories, sugar-mills, tanneries, brick-works, saw-mills, iron foundries and engineering establishments, clothing factories, flour-mills, and coach-building establishments. The state of the industries throughout Australia cannot, however, be gauged from a mere enumeration of hands employed. Most of the industries were on a small scale. In the four less populous states, the average number of hands to each establishment was not more than three or four, and only in the capital cities was there a considerable employment of machinery.

The prices of the principal articles of consumption were greatly reduced in this period as compared with those of previous years following the gold discoveries; rents also showed a great reduction. Taking the seven articles in common use, prices for which have been given for other periods, the following were the averages for Sydney:—

RETAIL PRICES IN SYDNEY.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Beer (Col.) per gal.	Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.	s. d.
1859	6	4½	4	5	4 0	1 10	8 0
1860	6½	5	4	5½	3 6	1 6	7 6
1861	6½	4	3	5½	3 6	1 8	7 3
1862	4½	3	4½	4½	2 0	2 3	8 0
1863	4	3	4½	4½	1 6	1 6	7 0
1864	5½	3	4	4½	2 0	1 6	5 0
1865	7½	3	3	4½	2 0	1 9	8 0
1866	6½	4	3	4	2 0	1 3	6 0
1867	3½	3½	2½	4	1 6	1 6	7 0
1868	4	4	3½	4	2 0	1 3	9 0
1869	3½	3	2	4	1 4	1 6	4 0
1870	3½	3	3½	4	1 4	1 3	5 0
1871	3½	2½	2½	4	2 3	1 3	4 0

The prices stated above are for articles of good quality. Cheaper articles of low quality went into consumption, but not to any very considerable extent. Bread, for example, was retailed in some places at one penny per loaf less than quoted, while low grade sugar was also retailed at about one penny per pound less than shown. The same remarks apply to the following statement of prices for Melbourne during the same period. The figures in most cases are approximate, as it is difficult in dealing with prices to determine if the quality of the articles is the same in each year compared. Further, it must be understood that the prices given have reference to the total quantity entering into consumption. In some years there was an extraordinary range in the figures quoted. Thus, in 1859, potatoes sold at 37s. 4d. per cwt., and in 1860 at 32s. 8d. per cwt. for a short period; but it is probable that very little entered into consumption at these prices, especially as bread was, weight for weight, much cheaper.

## RETAIL PRICES IN MELBOURNE.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Fresh Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.
1859	7	4	7 to 10	4½	2 10	9 4
1860	6	3½	4½ „ 6	4	2 6	9 4
1861	5	3½	3½ „ 4½	4	1 6	9 4
1862	4	3½	3 „ 6	4½	2 3	4 8
1863	4	3½	4 „ 7	4½	2 6	9 4
1864	6	3½	4 „ 6½	4½	1 3	4 8
1865	6	3½	4 „ 9	5½	3 0	4 8
1866	4½	3½	4 „ 9	5½	3 0	4 8
1867	4½	4	2 „ 7	4½	1 8	4 8
1868	5	3½	2 „ 6½	4½	1 7	9 4
1869	4½	3½	3 „ 7	4½	2 2	10 0
1870	3½	3½	3 „ 6	4½	1 9	4 8
1871	3½	3½	4 „ 8	4½	0 10	8 2

The prices of commodities in the Adelaide market were, on the whole, less than in Melbourne, but wages ruled higher in the latter city, although, as affairs became settled after the gold rushes had subsided, prices tended to become level in the great centres of population. Bread was usually cheaper in Adelaide than elsewhere, and meat cheaper in Sydney, while potatoes and other vegetables, as well as butter and cheese, were, towards the end of the period under review, of less price in Melbourne. Imported goods varied in price with the duties payable; nevertheless importers continued to keep a semblance of equality in quotations in the various cities by adapting the quality of the goods to the prices obtainable.

The following statement refers to Adelaide:—

RETAIL PRICES IN ADELAIDE.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Fresh Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.
1859	6	3	5½	5	2 1	8 10
1860	5½	3	6	5	1 8	8 9
1861	3½	3	4½	5	0 11	6 0
1862	3½	3	4½	5	1 0	8 0
1863	3½	3	4½	5	1 0	10 0
1864	5	3	5	5	1 0	7 3
1865	5	3	7½	5	1 8	8 0
1866	4	3	7½	5	2 1	7 10
1867	3	3	4½	5	1 1	5 8
1868	4½	3	3½	5	1 3	5 0
1869	3½	3	4	5	1 6	8 3
1870	4	3	5	5	1 0	4 9
1871	3½	3	4	5	0 10	3 10

The monetary position during the period was very peculiar. Up to 1861 interest allowed on deposits for twelve months by the banks was 5 per cent. In the year named the rate was reduced to 4 per cent., and remained unchanged until 1865, when it was increased to 6 per cent. for some and 6½ per cent. for other banks, private companies offering as much as 7 per cent. These high rates continued till August, 1867, when the interest fell to 5 per cent., and during the following year was reduced by successive stages to 3½ per cent. In the succeeding year the rate was increased, first to 4½ per cent. and then to 5 per cent., at which figure it remained until 1871, when there was again a reduction to 4 per cent.

The money market was much disturbed owing to the necessities of some of the state Governments. There was a large amount of New Zealand Government debentures bearing interest at 8 per cent. on sale in Sydney, and the New South Wales Government was so pressed for money that, at one time, it found itself compelled to place its 5 per cent. debentures at £70 per £100 of stock, allowing for redemption in twenty-eight years at par. This was equal to paying nearly 7½ per cent. interest.

The Governments of several of the states favoured the policy of assisted immigration, and during the ten years 1861–1870, 135,702 persons arrived in Australia, wholly or partly at the public expense. Of these, 18,165 came to New South Wales, 46,594 to Victoria, 56,586 to Queensland, 13,730 to South Australia, and 627 to Tasmania. The total accession of population from abroad during the same period was 173,277, viz., 68,191 to Queensland, 45,539 to New South Wales, 38,935 to Victoria, 17,949 to South Australia, and 5,891 to Western Australia; Tasmania, however, lost 3,228 persons by emigration. Though the country badly needed opening up, little progress was made during this period in railway extension, the average length of line opened being rather less than 80 miles a year.



During this period business was very much disturbed in New South Wales owing to the depredations of the bushrangers. From 1860 to 1870 was the great bushranging epoch in the state's history, which memorised such unworthy names as those of Frank Gardiner, the Clarkes, Dunn, Johnnie Gilbert, Ben Hall, Morgan, Power, "Thunderbolt," and O'Malley. The existence of this dangerous bushranging pest was a source of keen embarrassment to the Government, and a standing challenge to every Ministry which accepted office.

#### INDUSTRIAL PERIOD—1872-1893.

The twenty-two years from 1872 to 1893 do not call for such lengthened notice as former epochs, inasmuch as the statistics to be found in various parts of this volume give a detailed illustration of the progress made during the period. The preceding period had closed somewhat tamely. Population was not being attracted in any great numbers; the demand for land was not by any means so great as might have been expected from a consideration of the facilities afforded for its purchase, nor was there any extensive cultivation upon the land which was bought. The efforts that were made for the development of the country were not well sustained, except, perhaps, in Victoria, while railway construction was almost suspended. Expenditure by the Government on public works, either from revenue or from the proceeds of loans, was small, while little private capital found its way to the country. In such circumstances the industrial condition could not be said to have been hopeful. Nevertheless, causes were at work which were to affect materially the progress of Australia, especially of the eastern states.

The great discoveries of gold during the early fifties had given strength to the opinion that mining would speedily and permanently oust pastoral pursuits from the first position amongst the industries of the country. This expectation was soon disproved. From 1872 to 1893 the position of Australia as a gold-producing country greatly declined. In Victoria, the chief producer, the yield of the precious metal fell away from over £5,000,000, at the beginning of the period, to a little over £2,300,000 towards its close. In New South Wales the industry, which seemed very promising in 1872, in which year it yielded £1,644,000, fell away to less than one-fifth of that quantity in 1888. Queensland, on the other hand, began to display the richness of its gold mines. In 1872 the mines of that state already showed the respectable yield of £500,000; this was rapidly increased, and in 1878 the value of gold obtained exceeded a million sterling, and ten years later it was two and a half millions. This satisfactory condition of things was due to large discoveries of the precious metal at Rockhampton and Gympie, and subsequently to the wonderful deposits found at Mount Morgan. Tasmania could scarcely be called a gold-producing country at the beginning of this period; but in 1877 the famous quartz reef, afterwards worked by the Tasmanian Gold Mining Company, was

discovered, and in 1879 the yield reached a quarter of a million sterling, and, although it fell away in subsequent years, the discovery was most opportune. The gold discoveries in Western Australia do not belong to this period, but the long-accepted dictum that the country was without minerals was fully disproved, and in 1893, the year which closes the epoch under review, the gold won was valued at £421,000.

The chief coal-fields in the vicinity of Newcastle, New South Wales, yielded in 1872 about 1,000,000 tons; this was increased in 1891 to over 4,000,000 tons; and as 370 tons represents the employment of one man in or about the mines, the benefit of the additional output may be estimated. Queensland, Victoria, and Tasmania also began during the period to open up their coal-fields, but the value of the combined output of the three states, in 1893, was under £200,000.

Valuable deposits of other minerals were also worked to a considerable extent. In New South Wales, tin and copper were mined for during the whole period, the greatest value of production being £568,000 for tin in 1881, and £473,000 for copper in 1883. The quantity of these metals obtained was largely influenced by the weather conditions, which in some years were most unfavourable, while the extraordinary fluctuations in the price of the metals in the European markets also adversely affected their production.

Mining for silver became an important industry in New South Wales in 1885, and for the following year the yield of silver and lead, the two metals being found in conjunction, was about half a million sterling; in 1891 the value of the output was £3,600,000, and in 1893 it was still over £3,000,000.

In South Australia, copper-mining was an important industry, and added much to the wealth of the state, although towards the close of the period the output was greatly diminished, chiefly through labour disturbances. Queensland produced large quantities of tin and copper in the earlier years, but towards the end of the period, both metals being affected by a fall in price, the output, especially of copper, was considerably smaller. In Tasmania, there was an opportune discovery of tin at Mount Bischoff in 1871, when the island stood badly in need of an impetus to trade, and this important find marks the beginning of a new era in the mining and industrial history of the state. The discovery of gold in Tasmania has already been alluded to. Valuable lodes of silver-lead and copper were found in the western parts of the island, notably silver-lead at Mount Zeehan in 1885, gold and copper at Mount Lyell in 1886, and silver and lead at Heazlewood in 1887.

Taking Australia as a whole, agriculture made great progress from 1873 onwards. In 1872 the area under crop, exclusive of that devoted to grass, was 2,491,023 acres; in 1880 this had been increased to 4,583,894 acres; in 1890 to 5,430,221 acres. Of the larger states, the least progress was made by New South Wales, if progress be measured by acres under crop. In the ten years, from 1872 to 1882, the breadth of land devoted to the plough was increased by 247,689 acres, as

compared with 709,479 acres in Victoria, and 1,267,482 acres in South Australia. The smallness of the population in Western Australia precluded any attempt at cultivation on a large scale, while Tasmania, with its small home market, and entrance barred to the markets across the straits, made very little progress, the area under crop in 1893 being only 179,000 acres, as compared with 156,000 acres twenty years previously. So early as 1852, South Australia had produced sufficient wheat for its own requirements, and was exporting its surplus, part to Great Britain, and part to New South Wales and other states with deficient production, while, so far as foodstuffs were concerned, Victoria also became independent of outside assistance in 1877. The value of the country's production, however, is not to be estimated merely by the acreage under crop. The maize and sugar crops of New South Wales, estimated by their yield, would represent four times their area in wheat land. A more exact idea of the condition of the agricultural industry may be obtained from the figures relating to the value of production. Judged by this standard, the production of Victoria stood easily first during the whole period, while New South Wales and South Australia, with almost equal values, were second and third. In 1871 the return from agriculture in the Commonwealth States was £8,941,000, equivalent to £5 7s. 2d. per inhabitant; in 1881 the value had increased to £15,519,000, or £6 17s. 9d. per inhabitant; while in 1891 the production reached £16,480,000, or £5 3s. 6d. per inhabitant. This satisfactory result was obtained in spite of a fall of about one-third in the prices of agricultural products. Further details in regard to agriculture will be found in the chapter dealing specifically with this question.

When the development of the pastoral industry during this period is considered, it will be readily understood how it happened that certain states, well fitted for agriculture, showed comparatively little progress in the breadth of land brought under tillage. Leaving aside for the present the question of prices, and considering only the volume of production, it will be found that this period was the one, of all others, most favourable to the pastoral industry. Taking Australia as a whole, the following figures, giving the number of cattle and sheep and the weight of the wool clip at various periods, illustrate the position of the industry :—

Year.	Cattle.	Sheep.	Wool.
	No.	No.	lb.
1871	4,277,228	40,072,955	211,413,500
1881	8,010,991	65,078,341	324,286,100
1891	11,029,499	106,419,751	543,495,800
1893	11,546,833	99,799,759	601,085,000

The favourable position of the pastoral industry was maintained almost throughout the period in spite of a considerable fall in the prices

of the staple articles of production. This was especially the case in New South Wales and Queensland. In New South Wales the wool-clip in 1871 weighed about 74,000,000 lb.; in 1892 it was nearly five times that weight. In Queensland the chief interest was cattle-grazing, and the number of cattle increased nearly sixfold in twenty years—that is to say, from 1,168,000 in 1871 to 6,192,000 in 1891. The first check to this prosperous state of affairs was brought about by the fall in prices. High prices for all classes of local produce obtained in 1875; but from that year to 1877 there was a reduction equal to about 14 per cent. Nevertheless, at the reduced prices the industry was highly profitable, especially as the flocks tended to increase largely in numbers. Good prices prevailed until 1884, but there was a further fall of 16 per cent. in the ensuing two years. In 1886 the country began to feel the effects of price reduction, which almost counterbalanced the larger returns due to the increase in the number of stock depastured. From 1886 to 1890 prices continued with little change, but from 1890 to 1894 there was a steady decline, the fall in the four years being equal to 30 per cent. During the nineteen years, 1875 to 1894, the total decline was equivalent to 49 per cent., and affected all descriptions of pastoral products; and as there was no corresponding reduction in the cost of production, and little in the cost of transport, the reduced prices proved a very severe blow to the staple industry of the country.

The various manufacturing industries prospered over the greater portion of this period. The number of hands employed in Victoria in 1873 was 24,495; in 1880 the number had increased to 38,141; in 1885 to 49,297; and in 1889 to 57,432. This was the year of greatest prosperity in Victoria. Thenceforward the manufacturing industry greatly declined, and in 1893 the number of hands employed was 39,473, or no greater than in the year 1883. In New South Wales, also, there was considerable impetus given to the manufacturing industry, which in 1889 gave employment to 45,564 persons; but, influenced by the same causes that affected Victoria, the number of persons employed fell away in 1893 to 38,918.

In the earlier years of the period the expenditure of borrowed money by the states was very moderate; but as money became easier to obtain in the London markets, the various Governments availed themselves of their opportunities to the fullest extent. The public debt of New South Wales in 1871 stood at about 10½ millions; in 1881 it was still below 17 millions; from 1881 to 1891 it rose to 53 millions, showing an increase of 36 millions in ten years. During the greater part of this period New South Wales had an abundantly large land revenue, which was expended for current purposes; this, added to a huge loan expenditure, rarely less than £4,000,000 a year, gave the state a predominating influence in the labour market of the continent.

In Victoria there was much the same condition of affairs, except that the Government had not any considerable revenue from the sale of its

public lands. In 1871 the public debt in Victoria stood at 12 millions ; in 1881 at 22½ millions, and in 1891 at 43½ millions. In some years, considering the number of the population, the loan expenditure was prodigious, although never on so lavish a scale as in New South Wales. The largest outpouring in any one year from loan funds was in 1890, when £4,134,000 was expended. Queensland also indulged in borrowing on a scale much beyond its requirements. From 1872 to 1882 the expenditure from loan funds was nearly £900,000 a year. From 1882 to 1892 it averaged between one and two millions. In South Australia the state expenditure from loans during the period 1872 to 1892 was scarcely ever less than one million a year, in some years rising to as much as 1½ million. Western Australia was the only state in which the loan expenditure was kept within reasonable proportions, its total debt in 1891 being only £1,613,000. In Tasmania, from 1880 to 1890, 4½ millions was added to the public debt, expenditure slackening off after 1891.

In the eastern states the year 1892 was the first to show a restricted loan expenditure, the total for the five states, which in 1889 had been over 11 millions, and in 1890 about 10 millions, falling to less than 3 millions—equivalent to a shrinkage of at least 7 millions. This sudden contraction of expenditure had a most serious effect upon the labour market, and at least 40,000 men, accustomed to look to the Government or to contractors working under the Government for their employment, were thrown upon the labour market, which immediately became disorganised. Indeed, so far as New South Wales was concerned, the labour market was disorganised even in 1888, a state of affairs which did not altogether result from the cessation of expenditure on public works. Large numbers of persons had been attracted from the other states by the extravagant expenditure and vigorous immigration policy of preceding years, and on the Government reducing their expenditure from extravagance to moderation, thereby involving a decrease of about three millions sterling, some 15,000 men were left without employment. To mitigate the distress consequent upon the inability of the community to absorb so much labour thus thrust upon it, the Government started relief works, still further attracting the unemployed to the vicinity of Sydney, and an expenditure of nearly £400,000 was incurred upon useless works before they were abandoned.

As affecting the industrial condition of the country, the importation of private capital for investment, in addition to that brought by persons taking up their abode in the state, was almost as important as the introduction of money by the various state Governments and by the local governing bodies. During the twenty-two years under review, the amount of private capital sent to New South Wales for investment, in excess of what was withdrawn, amounted to some 19 millions, and the money brought by persons coming to the country was over 23 millions. The bulk of the capital sent for investment came within the five years 1886–1890, and with the assistance of what was expended by the state

during the same period and the preceding one, helped to bring about the industrial inflation so characteristic of those years. The investments made during 1871-1885 in Victoria by persons outside that state were very moderate in their amounts, and were probably not greater than the investments of Victorians in other states. During the years 1886-1890, entirely different conditions prevailed. In the short period of five years the private capital introduced or withdrawn from investments outside the state exceeded £31,500,000—a prodigious sum when the population of the state is considered; and when it is remembered that during the same five years the borrowings of the state Government and of the local bodies exceeded 17 millions, it is easy to understand the extraordinary inflation which arose, especially in Melbourne and the surrounding district. Every branch of industry was affected by the large amounts of capital available in the Melbourne market, and wages, rent, and the price of land reached very high figures. Speculation was carried on to the point where it became gambling, and all classes of real property assumed fictitious values. As illustrative of this, it may be mentioned that the rental value of Melbourne and suburbs during the boom period was £6,815,315, which became reduced when the boom collapsed in 1893 to £5,847,079. In Sydney the inflation brought rental values of the metropolitan district to £6,067,882, which was reduced by the year 1897 to £5,022,910. All the states except Western Australia and South Australia were the recipients of the attention of the British investor. Queensland received nearly nine millions of private capital in the five years 1881-85, large investments being also made in the immediately preceding quinquennial period. From 1885 onwards, however, there was a tendency in Queensland to withdraw capital. Tasmania received about one million pounds during the five years 1871-1875 for investment on private account, and in the subsequent five-yearly periods the amount invested varied between £400,000 and £500,000. These sums were not larger than the island state could readily absorb. There can be no doubt whatever that during many years Australia received more capital, both public and private, than could be legitimately utilised, and no small portion of it was necessarily devoted to purposes purely speculative. Many persons became suddenly rich by land speculation; on the other hand, as the land which they sold had a productive value far short of the interest represented by the purchase money, many of the purchasers, of whom there were thousands, became embarrassed, and it was some years before they could free themselves from their difficulties. The financial institutions, which had greatly assisted to promote the speculations, became involved also, and by the failure of their customers to redeem mortgages, these institutions, including several of the banks, became the possessors of a large amount of property on which advances had been made beyond all possibility of recovery. There was, however, an evil of greater consequence than the temporary inflation of values. It will be readily conceived that the introduction of capital within the limits of absorption,

and the application of it to productive purposes, are conducive to true progress ; while, on the contrary, the over-introduction of capital, however applied, means arrest of progress. An example of this may be taken from the history of New South Wales during this period. Of the twenty-two years comprising this industrial period, 1885 and 1886 witnessed the largest introduction of capital, namely, £11,470,000 in the former, and £10,028,000 in the latter year. It is therefore not astonishing to find that the value of domestic produce exported in those two years, when compared with the population, was less than in any other period since the discovery of gold. It must not, however, be supposed that the money introduced by the state or by private persons was to any large extent absolutely wasted. The states carried out many public works of a remunerative character and highly beneficial to the community generally, and the foundations of many important industries were laid by private enterprise during the period. It is true many private investors suffered great loss by the fall in prices which subsequently occurred, but this was a private evil and not a national one. The most detrimental effect produced by the "boom," as it is called, was the withdrawal of large bodies of men from productive pursuits and the derangement in the labour market which immediately ensued.

An interesting discussion has been raised as to the effect of the import of capital on the productive enterprises of the country, and a close study of the question undoubtedly supports the opinion that although Australia is capable of absorbing yearly a certain amount of capital to the advantage of the Commonwealth and of persons who make the investment, the amount is strictly limited, and has been frequently over-passed. It will be seen from the facts set out in the chapter relating to Private Property and Incomes that, in some years, the various state Governments have hardly set bounds to the importation of money to forward their state enterprises, while the importation of capital on private account has also been, at times, unduly large. If the figures in the different parts of this volume be brought together, it will be clear that the years in which an undue importation of capital took place compare unfavourably as regards production with years in which there was a more moderate import, and that the lowest point of production was reached in the years when the largest amount of capital was brought to the country, and the highest in those years in which a very reduced amount reached these shores.

Although New South Wales cannot be regarded as the worst example of over-importation of money, its experience may be taken as typical of Australia. Going back thirty years, it will be seen that from 1870 to 1881 there was a gradual increase in the area of land devoted to the plough. During this period, the annual importation of capital on public and private account was about £1,500,000 per annum, and although it must be confessed that, in some years, especially towards the close of the period, more money was brought to the country than

could be conveniently absorbed, this was the exception and not the rule. During the whole period fair progress was made in rural pursuits, and in 1882 the area under crop was 660,000 acres. For the ensuing ten years the importation of capital averaged about £5,120,000 per annum, a prodigious sum considering the population of the state at that period ranged from 750,000 to about 1,000,000 persons. There can be no question but that £51,200,000 in ten years was more than New South Wales could conveniently absorb, and although there was a considerable increase of population the immigrants did not find employment in rural pursuits to any large extent, while many men engaged in farming and grazing were enticed from these primary industries to railway construction and works connected with city industries. The consequence is reflected in the returns relating to agriculture, for at the end of the ten years, the breadth of land devoted to crops had increased to 846,000 acres, that is by 186,000 acres or 28 per cent., which must be regarded as a very insignificant result, seeing that in the interval the land sales were enormous, and population had increased nearly 50 per cent. For the year 1892 there was a falling off in the importation of money, and the bank crisis of 1893 put a stop to the importation of capital on private account, although the Government continued to borrow moderate sums until the year 1899. Taking the eight years from 1892 to 1899, the importation of capital of all kinds fell to an average of £1,300,000 per year, a sum well within the absorbing capacity of the country, while the breadth of land devoted to crops was increased three-fold. The year 1899 showed a total area of 2,439,000 acres under the plough, which is the maximum area that the state can show. Since 1899, there has been considerable borrowing by the state Government, and agriculture has slightly retrogressed; this is partly due to the adverse character of the seasons, but also, it must be confessed, to the alluring effect that an expansive public works policy has had on the minds of persons engaged in agricultural industries. Nor does the curtailment of expenditure have the effect of sending workers back to the land, for the common experience of Australia is, that men who have been enticed away from rural industries to the towns evidence great reluctance in returning to their former pursuits.

From the point of view of wages and cost of living, the greater part of this period was an extremely prosperous one, improving year by year from 1872 onwards. At no period, except in the five golden years, 1853-7, were wages so high, and at no previous period was the purchasing power of money so great. The tide of improvement reached its highest level just before 1885, and in 1886 the signs of a reaction were visible. This was unfortunately coincident with the fall in prices already spoken of. The profits of capital became reduced and employers immediately attempted to reduce wages. In 1886 and the five years following, many strikes and trade disputes occurred. In New South Wales, in 1886-87, work in some of the southern district collieries was suspended for nearly twelve months by strikes and disputes; in 1888 the coal



miners in the northern districts were on strike for several months ; and in 1888 and 1889 the completion of various large public works threw out of employment some 12,000 men—no inconsiderable proportion of the unskilled labour of the country. In 1890 the maritime and pastoral industries were disturbed by strikes and disputes, very hurtful to the community in general and the working class in particular ; and in 1892 another disastrous strike occurred, causing the silver-mines at Broken Hill to remain idle for nearly three months.

The bulk of the production of Australia is for export, and a very small proportion of the produce of the pastoral industry, with the exception of meat, is consumed in the country. The mineral products are also almost entirely exported, and there is a surplus production of bread stuffs. The prices, therefore, which the Australian producer can obtain for his produce are determined by prices and conditions in Europe or America, over which he can exercise little or no control. As a consequence, with a fall in prices of staple produce, employers almost invariably seek to balance their accounts by a reduction in wages ; and under existing conditions it is practically necessary, if production is to continue, that the employees' wages should fall with the prices obtained for the commodity produced. In 1891 and the following years, Australia as a whole was face to face with a falling off in the quantity of production, and a decline in prices. The wage-earners were slow to concede the necessity of wages sharing in the general decline, and this was the root difficulty which caused the labour troubles preceding the crisis of 1893. It has been attempted in some quarters to fix upon the Labourers' Unions the responsibility for the events of that year. When it is remembered that the country was entirely over-capitalised, that land values had risen exorbitantly in the principal cities, and that the banks and financial institutions were largely concerned in maintaining the position of speculators, and were themselves, contrary to the spirit of the law and of their charters, the holders, either as mortgagees in possession or directly, of large squattages and landed properties in the cities and towns, it is easy to conceive that if the working classes had obediently acquiesced in all the demands for a reduction of wages, the crisis would still have happened. In the light of subsequent events, it must be confessed that the crisis was by no means the disaster which has been pictured. On the contrary, as will be seen from other parts of this volume dealing with the progress of production, all the producing interests of the state can look back to this time as a period of general awakening, and general production has made far greater progress since 1893 than ever before, in spite of adverse seasons and persistently low prices.

The flourishing condition of the pastoral industry throughout the greater portion of this period gave a marked impetus to the export trade. In 1872 the total value of the exports of the six states amounted to £32,212,000 ; this was an extremely large showing for a population of only 1,708,502. In 1875 the value of exports had grown to

£38,704,000, representing £20 11s. 3d. per head of population; in 1880 it reached £42,671,000 or £19 6s. 8d. per head of population; in 1885 it was £44,722,000 or £16 15s. 1d. per head; and in 1891 the total reached the enormous figure of £63,138,800, which is equivalent to £19 14s. per head of the population. These figures of course include re-exports and interstate trade; but when every allowance is made on these accounts it will still be found that the production of Australia, as measured by its exports, compared very favourably with that of any country in the world. The year 1891 represented the summit of Australian trade up to that time. In the following year there was a considerable falling off. This, however, was due more to the decline in prices than to any failure in production. The imports into Australia represent the return for the exports in addition to the proceeds of loans raised by the states and the investments made by foreign capitalists, less the interest and earnings of investments held by persons living outside its boundaries. The value of the imports fluctuates considerably, and in years of heavy borrowing shows very large figures; thus, in 1885 the imports exceeded the exports by £11,179,000, in 1889 by £9,305,000, and similarly in respect to other years.

After a long period of neglect the Governments of the various states began in 1873 to attend to the expansion of their railways. In 1872 the mileage in operation was 1,122; in 1874 it had risen to 1,346, and from this time onwards progress was rapid. Within four years the mileage open for traffic was doubled, and in ten years was quadrupled, the mileage in 1884 amounting to 5,694; and by the end of the period under consideration—that is, the year 1893—the length open for traffic exceeded 10,300 miles.

The expansion of general business during the same period may be gauged with considerable accuracy from the extension of the banking facilities. During the twenty-two years under review, banks were opened in every important centre of Australia, and it is estimated that in 1893 there was one bank or branch in operation for every 3,000 of the population. The deposits in 1872 were 23 millions; in three years they had increased 50 per cent; in seven years they had doubled; and in eleven years the increase was threefold—that is to say, in 1884 the sum on deposit reached £69,936,000. In 1891 the business of the banks reached its highest point, and the amount of money deposited was, in round numbers, 100 millions, equivalent to £31 4s. 2d. per head of population. This enormous sum, however, was not derived wholly from the Australian people, as large amounts were obtained in the United Kingdom and transmitted to Australia for investment. After 1891 the banking business slackened off, and in 1893 the great financial crisis occurred, of which mention has been made so frequently, and was accompanied by a very large withdrawal of deposits, chiefly by persons resident in the United Kingdom. In 1895 the amount on deposit was reduced to 86 millions, which included a considerable sum, estimated at about 54 millions, locked up in reconstructed banks. The

crisis of 1893 involved the suspension of thirteen banks, of which six had their head-quarters in Victoria, two in New South Wales, three in Queensland, and two in London. Coincident with the increase in the money placed with the banks of issue was a very large increase in the deposits in the Savings or people's banks. In 1872, the sum on deposit was £3,810,000; in 1880 it had risen to £5,867,000; in 1885 to £10,199,000; and in 1891 to £15,477,000. From this point it leaped to £18,100,000 in 1893, but the increase was not entirely due to working class deposits, as it represented to some extent money withdrawn from the banks of issue at the time of the crisis. At the highest point in the period, namely, the year 1893, the total deposits represented £5 9s. 5d. per inhabitant; and although this figure has since been greatly exceeded, it was considered at the time, and justly so, a tribute to the earning capacity of the Australian working population and an index of its material condition.

During the twenty-two years from 1872 to 1893 the population of Australia was practically doubled. The greater portion of the increase was due to births, the excess of persons arriving over those departing, though important in some of the states, being not very considerable for Australia, taken as a whole. Several of the states, notably New South Wales and Queensland, maintained the policy of assisted immigration during the larger portion of this term, and in New South Wales alone nearly 50,000 persons were introduced in the ten years preceding 1886, and in Queensland the average number per annum brought to the country at the public expense from 1873 to 1892 was 9,746. Various important changes took place in the positions of the states in regard to population. During nearly the whole of this period Victoria had the premier position, but at the close of 1891 New South Wales took the lead and South Australia yielded the third place to Queensland in 1884. Western Australia was still far in the rear. Established before any of the other states except New South Wales and Tasmania, the population of this huge province did not in 1893 amount to more than 65,000—a condition of affairs due almost entirely to its isolation and the absence of mineral discoveries. Western Australia was on the eve of reaping great benefits from its gold discoveries, but the record of these and of the great influx of population which resulted therefrom belongs to the succeeding period.

It is impossible within the limits of this chapter to give a statement of the wages paid in all industries, or even in the leading industries of the various states. The illustrations given are therefore confined to the rates paid in certain well-known trades, and these it is thought will indicate sufficiently well the general condition of wages in the other trades. In considering these examples it should be remembered that wages in Australia do not always indicate the condition of the productive industries of the country; and especially is this the case when, as from 1882 to 1889, the Governments of the states are large borrowers and large employers of labour. Wages, generally speaking, rose rapidly

after 1872, and reached a high level in 1874, thenceforward remaining stationary till 1883, when there was a distinct rise, and continuing fairly level at the advanced rates until 1889. From a labour point of view, these seven years may be considered amongst the best Australia has experienced. During this period carpenters received 11s. a day in Sydney, and from 10s. to 12s. in Melbourne; blacksmiths from 10s. to 14s. in Melbourne and 10s. in Sydney; bricklayers, 12s. 6d. in Sydney and from 10s. to 12s. in Melbourne; stonemasons, 11s. 6d. in Sydney and from 10s. to 12s. in Melbourne; plasterers, 12s. in Sydney, and about the same in Melbourne, and 11s. in Adelaide; painters, 11s. in Sydney, 10s. in Melbourne, and 9s. in Adelaide; boilermakers, up to 14s. in Melbourne; and navvies employed on public works, 8s. in New South Wales, 7s. in South Australia, and from 6s. to 7s. in Victoria. In 1890 wages made their first decided move downwards, and, compared with the previous year, there was a fall equivalent, on an average, to 1s. per day. Consequent on the financial crisis of 1893, wages again fell, and continued falling, until, so far as most trades were concerned, they touched their lowest point in 1895, although for some workers—notably navvies and common labourers—the period of acute depression lasted a year or two longer.

The following is a statement of the average daily wage paid in the four leading cities from 1872 to 1879:—

Trade.	Average daily wage paid in—			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter.....	9 9	9 11	8 8	10 3
Bricklayer.....	10 0	10 10	9 0	10 4
Mason .....	10 9	10 7	9 2	9 0
Plasterer.....	10 0	10 11	9 10	10 0
Painter .....	9 0	9 3	9 0	9 10
Blacksmith.....	11 2	10 3	8 10	10 3
Boilermaker.....	11 0	9 6	9 0	10 6
Navvy or common labourer.....	6 3	7 1	6 9	6 0

Taking the wages as a whole, those paid in Sydney and Brisbane average about the same figure. In the building trades the wages paid

in Sydney and Brisbane were superior to those in Melbourne; but in the iron trade, such as blacksmithing, boilermaking, and the like, the wages in Melbourne were higher than in any of the other cities. Throughout the whole of this period the wages paid in South Australia were distinctly lower than in the other states, except navvies' wages, which were very nearly equal to those paid in New South Wales.

From 1880 to 1891 the average wages in Melbourne, Sydney, and Brisbane were fairly uniform, but in Adelaide the ruling rates were some 10 per cent. below those of the neighbouring states. Navvies and others employed on public works in New South Wales received on an average about 8s. per day throughout the whole period of thirteen years extending from 1879 to 1891. Considering the cost of living, this is the highest wage ever paid in Australia for this description of labour. In Victoria and Queensland the rates touched 7s. 6d.; in South Australia, 7s. The following represent the average wages from 1880 to 1891:—

Trade.	Average daily wage paid in —			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter.....	10 7	10 3	8 6	11 0
Bricklayer.....	10 9	11 4	9 0	11 0
Mason.....	10 10	10 10	9 2	9 10
Plasterer ..	10 9	11 3	10 6	10 0
Painter .....	9 0	9 10	8 10	10 0
Blacksmith.....	11 8	10 6	9 6	11 0
Boilermaker.....	11 10	9 10	9 6	11 0
Navvy or common labourer.....	6 9	8 0	6 6	6 0

From 1892 to 1896, which was a period of great disturbance, wages remained higher in South Australia than in any of the other states, the reduction from the average of the previous years in the case of this state not being very great; whereas in Victoria, in New South Wales, and in Queensland the reduction in some cases was as much as 25 per cent., and work was much more difficult to procure. The iron trades in Victoria, in spite of the general fall, maintained a strong position during

this period, but the building trades generally reached a very low level. Carpenters in Melbourne received 7s. 5d., compared with 8s. 11d. in New South Wales and 8s. 4d. in Queensland. Bricklayers received 7s. 6d. in Victoria, 9s. 8d. in New South Wales, 9s. in South Australia, and 9s. 3d. in Queensland; blacksmiths, however, were paid 10s. in Victoria, 8s. 6d. in New South Wales, and about the same in South Australia and Queensland. Navvies were paid at the rate of 6s. a day in all the states.

Trade.	Average daily wage paid in—			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter .....	7 5	8 11	8 6	8 4
Bricklayer .....	7 6	9 8	9 0	9 3
Mason .....	8 6	8 11	9 0	11 2
Plasterer .....	7 8	8 6	8 10	8 10
Painter .....	6 8	8 0	8 0	7 6
Blacksmith .....	10 0	8 6	8 6	8 4
Boilermaker .....	10 6	9 0	10 0	8 4
Navvy, or common labourer .....	6 0	6 0	6 0	6 0

The approach of the crisis of 1893 was heralded by many signs. Deposits were shifted from bank to bank; there was a run on the Savings Bank at Sydney, an institution guaranteed by the state; mortgagees required additional security from their debtors; bankruptcies became frequent; and some of the banks began to accumulate gold against the evil day. The building societies and financial institutions in receipt of deposits, or so many of them as were on an unsound footing, failed at an early period of the depression; so also did the weaker banks. There was distrust in the minds of the depositors, especially those whose holdings were small; and the banks, even long before the crisis arrived, were subjected to the strain of repaying a large proportion of their deposits as they fell due. The crisis, however, was by no means a sudden crash; even when the failures began to take place they were spread over some considerable period, the time between the failure of the first bank and that of the last being sixteen weeks.

The first noticeable effect of the crisis was a great scarcity of employment. Wages fell precipitously, as also did rents. There was almost a complete cessation of building, and large numbers of houses in the chief cities remained untenanted, the occupants apparently moving to lodgings, or more than one family living in a single house. Credit became greatly restricted, with the result that all descriptions of speculative enterprise came to an end; and by reason of the lowering of wages and decline in profits, the demand for most articles of domestic

consumption declined also. This is seen from the fact that in 1894 there was a reduction in the imports into Australia of £4,300,000. The manufacturing industry was the first to feel the effects of the crisis, and there was a reduction in the average number of persons employed in the two leading states which may be set down at not less than 25,000. This reduction, however, was spread over four years. The closing of the factories was not general; the establishments were kept open, but there was a dismissal of workmen and a restriction of output. Lack of employment in the factories had an immediate effect on the coal-mining industry, the output of coal being about one-fourth less in 1893 than in the previous year.

The crisis was felt in the large cities more keenly than in the country districts, and in Melbourne more severely than in any other capital. The change of fortune proved disastrous to many families, previously, to all appearances, in opulent circumstances; but by all classes alike their reverses were borne with the greatest bravery. In its ultimate effects the crisis was by no means evil; on the contrary, its true meaning was not lost upon a business community that required the chastening of adversity to teach it a salutary lesson, and a few years after its first effects had passed away business was on a much sounder footing than had been the case for very many years.

The banks of issue showed large withdrawals of deposits, practically the whole of the money received from the United Kingdom being withdrawn as it became due; so that in 1898 the Australian banks had on deposit £17,175,000 less than in 1891, their highest point before the crisis occurred. There were also large withdrawals of local deposits, but the bulk of these found their way into the Post Office and other Government Savings Banks.

#### INDUSTRIAL PERIOD 1893-1904.

The compensations which followed the crisis were many, and the country would have recovered with surprising quickness from the blow which the credit of the community and of all its financial institutions had received, were it not for the adverse seasons which afflicted the great pastoral industry.

Prior to the crisis the extent of credit given to storekeepers and other tradespeople was on the whole much greater than sound experience warranted, and one of the first results was to put trade on a sound basis, and to abolish most of the abuses of the credit system. Attention was almost immediately attracted to productive pursuits, and the recovery made by the country as a whole, though slow at first, owing to the depression in the pastoral industry, was steady. Renewed attention was given to agriculture, especially in New South Wales, where, in 1901, 1,450,000 acres were devoted to the plough in excess of the area cultivated in 1893. In Victoria there was an increase of 870,000 acres, in Queensland 210,000 acres, and some slight extensions in the other states.

There was also a complete revival in the mining industry. The production of gold in New South Wales was almost doubled, and was largely increased in Victoria, Queensland, and Tasmania. In Western Australia the great gold discoveries which have placed that state at the head of Australian gold-mining, and amongst the leading gold producers of the world, were made subsequent to the crisis. Taking Australia as a whole, the output of gold in 1893 was £6,215,472; in 1903 it reached a total of £16,294,000, notwithstanding the unfavourable conditions affecting production in several states.

It was unfortunate that this time of financial distress should have been succeeded by a period of low prices for articles of local production, and that the great pastoral industry should have suffered from untoward seasons. The sheep depastured in Australia in 1893 numbered 99,800,000; in 1899 the total was reduced to 74,300,000; and in 1903 to 55,000,000.

During the years 1894 and 1895 prices reached their lowest level, but a slight recovery took place in the following two years, and this was succeeded by still further improvement, so that at the present time the average level is about equal to that of 1891.

In 1894 the total value of the imports into Australia was £41,930,720, equivalent to £12 6s. 8d. per inhabitant. These figures are far below those recorded in previous years. The imports in 1889, for example, were valued at £62,551,992, or at the rate of £20 13s. 7d. per inhabitant. It must be borne in mind, however, that extensive borrowing took place during 1889, and a considerable proportion of the imports was due to loan money brought to the country by the states, and to deposits in the banks, which were subsequently withdrawn during the financial crisis. From 1895 onward a material expansion took place in the trade of the states, and in 1900 the value of the exports was higher than at any previous period, thus showing that the country had completely recovered from the financial paralysis of 1893. It must be conceded that from every point of view sound industrial progress has been made during the last few years, and this is all the more gratifying when consideration has been given to the fact that, in some part or other of the continent, the main industries—those of sheep and cattle raising—were during the greater portion of the period seriously hampered by adverse weather conditions.

The progress of the manufacturing industries is dealt with at some length in another portion of this volume, and need not be further referred to here. It may be stated, however, that the ground lost during the financial crisis has been more than recovered, and the amount of employment afforded is now greater than ever before in the history of these states.

The movement in wages from 1896 to 1901 was distinctly upward. Carpenters, for example, were in 1896 paid 8s. per day in Sydney, while in 1900 their wages were 9s. 6d., in 1901, 10s., and in 1902, 9s. 6d. Though wages in Melbourne at these periods were lower than in Sydney,



their upward movement has been even greater, for in 1896 carpenters' wages in Melbourne ranged between 6s. and 7s. per day, the greater number being employed at the lower figures, while in 1900 the accepted rate was 8s. 3d., in 1901, 10s., and in 1902, 9s. As regards other trades connected with building, there has also been a marked improvement, and the rates of 1903 approach very closely those paid in 1891—that is to say, before the changes accompanying the financial crisis began to be felt. The building trades suffered more heavily than any others during the period of financial disaster, and their recovery was also more protracted. Over-speculation in business was in part responsible for the crisis; and even after its immediate effects had passed from sight, there was still great reluctance to embark capital in this form of investment, although a reasonable return seemed to be fairly assured. Building operations being therefore carried on only in cases of necessity, and when exceptional profits were looked for, the wages of the artisans employed were less affected by the return of better times than might otherwise have been expected. In other branches of industry there was a marked revival, and wages shared in the upward movement.

Federation undoubtedly is a strong force in the direction of increased production and larger employment of capital, and an expansion of industrial activity should follow in its train; but the pastoral industry, which is the key to the industrial condition of Australia, was seriously affected during 1902 by the adverse climatic conditions which prevailed over a great part of the continent. Although the year 1903 opened under most favourable conditions the rains came too late to save the harvest, and the returns from cultivated lands for the season 1902–3 were the worst on record. Abundant rains fell throughout 1903, and a very large area was ploughed and sown, while the harvest returns were most bountiful, far exceeding any previous yields. The price obtained for wool and other staples during 1904 was very satisfactory, and the lambing was exceptionally good, so that the prospects of the great primary industries at the time of writing are very encouraging. There is, however, a feeling of unrest in business circles, for which there does not seem to be any adequate material reason, as well as a general absence of speculation and a tendency to restrict credit. This condition of affairs has been variously explained according to the point of view of the person offering the explanation—moral, political, and economic reasons have all been given—but there can be no question that the present is simply a repetition of previous experience. There have been bad seasons in Australia before those of 1900–2, followed also by excellent seasons and rapid recuperations. The beginning of the recuperative period is almost always one of liquidation and lack of enterprise, and it would seem that the present period of recovery is being marked by like signs to those that distinguished its predecessors. The period of stagnation has never been of long duration, and is not likely to be so at the present time.

## RECENT INDUSTRIAL LEGISLATION.

The conditions of labour in Australia and New Zealand have, since the year 1894, been affected by certain new elements which have the promise of very powerfully influencing the industrial position in the near future, and in order to understand rightly the working of these elements it will be necessary to describe in rough outline the factory, shop, conciliation, and arbitration laws of these states.

Although the condition of workers in factories received attention in England so far back as the year 1802, and comprehensive legislation dates from 1844, it was not until 1873 that there was any Australian enactment on the subject. In the year named the Parliament of Victoria passed a statute, which, amongst other provisions, enacted that no woman or girl should work in a factory for more than eight hours a day. New Zealand followed immediately with an Act, which was practically a transcript of the Victorian measure.

The factory system did not, until recent years, play an important part in the industrial life of Australia; but there have been factories in all the principal towns for many years, and it is a world-wide experience that where there are factories working uncontrolled by legislation there will always be more or less disregard of cleanliness and sanitation. This was sufficiently demonstrated by the Victorian Royal Commission of 1882, which followed upon a vivid exposure of the evil conditions of local factories made by the *Age* newspaper. The Commission did most useful work, and from its report came the Factories and Shop Act of 1885. Under that enactment the number of persons technically required to form a legal factory was fixed at six, including apprentices, and provision was made for ensuring cleanliness, air space, sanitation, the requirements of decency, and for safeguarding the health of workers and their safety in life and limb. Inspectors were appointed, and under the operation of the law the old dilapidated workshops disappeared, and the well-built, well-lit and roomy factories, now found everywhere in Melbourne, took their place. The law remained practically unchanged until 1893, when the number of persons constituting a factory was reduced to four. This, however, was only a preliminary step to further and more radical changes. In 1896 the law was further expanded, and the term factory was extended to every place in which furniture was manufactured, to every place in which a Chinese was engaged in laundry work, and to all laundries in which four persons were employed, excepting laundries carried on by charitable institutions. Powers of prosecution were given to inspectors after a factory or work-room was found to be in an insanitary condition. The Chief Inspector of Factories was empowered to condemn any factory or workroom which was, in his opinion, dilapidated, unsafe, or unfit for use. It was also provided that no portion of a factory or workroom could be used as a sleeping-place unless such sleeping-place were separated from the factory by a substantial wooden partition extending

from floor to ceiling. No child under 13 years of age was allowed to work in a factory, and no female whosoever and no boy under 16 years of age could be employed in a factory for more than ten hours in a day or after 9 o'clock at night. It had already been provided that such persons could not be employed for more than forty-eight hours a week. In furniture factories and laundries where a Chinese was working, it was provided that no person was to work before 7.30 o'clock in the morning or after 5 o'clock in the evening, or on Saturday after 2 o'clock or on Sunday at any time whatever. All persons in charge of boilers and steam engines were required to hold certificates of competence, and very special and extensive powers were given to the Department administering the Act to enforce cleanliness, ventilation, and sanitation. These were the main provisions in regard to the work of the factories, but the Act of 1896 introduced most important provisions regarding wages, which will be referred to later on.

New South Wales was very slow in taking steps for the proper regulation of work in factories. Various bills had been prepared and one had been introduced into the Legislature, but no serious attempt was made to deal with the matter on behalf of the Government, and, apart from the Government, legislation would have been impossible. In the year 1890 the Census and Industrial Returns Act was passed, under which the Government Statistician was empowered to report on the condition of the factories of the state, and pursuant to the authority contained in the Act, the officers of the Statistical Department made an exhaustive examination of factories and workshops in the large centres of population, and a series of reports was drawn up indicating the condition of the workers. The chief abuse found to exist was the almost uniform absence of due provision for sanitation and for the preservation of decency. Though sweating was not found to exist to any large extent, home workers were found to be grossly underpaid, and in many respects a strong case was made out for the necessity of passing a proper Factories Act on the lines of legislation in force in other states. Parliamentary action, however, was not taken until the year 1896, when the Factories and Shops Act was passed on the lines of the Victorian Act of 1885. Good work has been accomplished under the Act, but the powers conferred on the administration are limited compared with those found in the existing Acts of other states.

In South Australia nothing of importance was accomplished in the way of regulating employment in factories until the year 1894. The Act of 1894 did not, however, go far enough to cope successfully with the evils that had arisen, and in 1900 the law was changed, and an Act based on the Victorian model was passed, but going even farther than the original, for a factory was declared to be any workroom where anyone was working in an owner's employ.

In Queensland work in factories remained unregulated until 1896, when tentative legislation on the lines of the New South Wales Act was passed; this legislation proved insufficient, and gave way in 1900

to a carefully framed and comprehensive Factories and Shops Act as far-reaching in its provisions as that of any other state.

In Tasmania there is as yet no legislation regarding employment in factories, but there is a law for the protection of persons using machinery.

In Western Australia the factory legislation is much like that of the more advanced eastern states, the most recent legislation on the subject having been passed in 1903.

Although New Zealand cannot claim to be the pioneer of Australian legislation in regard to factories, this being an honour which is due to Victoria, it may be claimed on behalf of that colony that Victorian legislation was closely followed from the outset. In 1873 the Victorian Act was adopted by New Zealand under the title of "The Workshops Act." Like its prototype this Act made but a small advance upon the road to factory legislation. In 1890 a Royal Commission was appointed to inquire into the state of labour and industry, and consequently upon the report of this Commission the Government of the day introduced and passed a Factories and Shops Act somewhat on the lines of the Victorian Act of 1885; but the law was almost immediately amended in 1891 and again in 1894, when one of the most radical measures, dealing with employment in factories, was passed. In 1901 an act was passed superseding all previous enactments, and this remains law in the colony to the present time. New Zealand has been divided into factory districts under the charge of a Chief Inspector and 150 local inspectors. As a "factory" or "workroom" includes any place in which two or more persons are engaged in working for hire or reward in any handicraft, there are few operatives who do not come within the scope of the Act. Children under 14 years of age are not allowed to be employed, and the hours of labour, holidays, etc., of women and youths under 16 are strictly regulated. Good ventilation, sanitary accommodation, and general cleanliness of buildings are insisted upon; machinery has to be properly guarded and fire-escapes provided, while dangerous occupations are specially classified. In order to assist the system of free general education which prevails in the colony, young persons are not allowed to work in factories till they have passed the fourth standard of the state schools, or an equivalent examination, while still further to discourage their employment it is provided that young children shall not be employed without wages, and the amending acts give a rate of wages on an ascending scale for their payment, this scale being continued up to the age of 21 years. To prevent the introduction of the great evil of "sweating," articles made or partly made in private dwellings or unregistered workshops, have to be labelled when offered for sale, in order that goods so manufactured (likely enough in unsanitary premises), may not be placed in the market for competition with work done in properly inspected factories. Any person removing such labels is liable to a heavy fine. The factory inspectors also

exercise supervision over the sleeping accommodation provided for shearers in country districts. A female inspector of factories gives her assistance in the duties of the department, travelling from place to place, and particularly inquiring into the working conditions of the operative women and girls. There are other provisions directed towards preventing the employment of children of tender years, and punishing parents who endeavour to evade the Act in regard to their own children. This Factories Act is one of a long series of other acts passed by the New Zealand Parliament and termed the "Labour Laws." The New Zealand Year Book gives a list of thirty-five acts which come under this category.

Besides the regulations governing employment in factories, there is, in the majority of the states, the corollary of this legislation, viz., laws dealing with the hours during which shops may remain open for the sale of goods. As in the matter of factory legislation, so in regard to the compulsory closing of shops the credit of initiation belongs to Victoria. The Act of 1885 to which allusion has already been made, declared that the hours for closing shops in towns generally should be 7 o'clock in the evening on five days a week, and 10 o'clock on Saturday nights, shops dealing with certain classes of food and perishable products being exempted from the operation of the law. In order that there should be an intelligent application of the law, the various municipal councils were authorised to pass by-laws allowing other classes of shops than those enumerated in the Act to remain open after the hours named, and at the same time the councils were empowered, if they thought fit, to close the shops earlier than 7 o'clock. Penalties for breach of the law were also left to the determination of the councils. The beneficent intentions of the framers of the law failed owing to the perfunctory way in which the municipal councils carried out their duties in regard to early closing, and a very unsatisfactory condition of things prevailed until the amending Factories and Shops Act was passed in 1896, to which allusion will be made later on.

Meanwhile New Zealand had taken the matter in hand, and the Shops and Shop Assistants Act of 1894 was passed. The main provisions of this Act, as amended in 1895, 1896, and 1901, are as follows :—

All shops in towns and boroughs are to be closed for one afternoon in each week, but a few shops, such as those of fishmongers, fruiterers, and eating-house keepers, are exempted on account of their convenience to the general public. The assistants in such establishments and in the bars of hotels and in country stores must, however, have a half-holiday allowed them in each week. Very small shops carried on by Europeans without paid assistants are also exempt from closing on a general half-holiday, but these shops must be closed on one afternoon in each week. The hours of work for women and young persons are defined. Sitting accommodation must be provided in all shops, and the necessary time for meals shall be given to all workers and sufficient sanitary accommodation

provided. The Act goes still further, and enumerates the working hours, holidays, and such like of clerks employed in banks and mercantile and business offices.

The Victorian Act of 1896 passed to remedy the defects found in the Act of 1885 did not go so far as the New Zealand Act—the initiative of closing was left with the shopkeepers, and considerable power still remained in the hands of the municipal councils. The Victorian Act, however, was an early-closing law, which the New Zealand Act was not. In 1900 the Parliament of Victoria passed an Amending Act, restricting the hours of all males employed in shops to fifty-two, carters, porters, and night watchmen alone being excepted. The law does not, however, apply to the whole state.

The Early Closing Act of New South Wales was passed in December, 1899. This Act provides for the compulsory closing of shops at 6 o'clock on four days in the week, 1 p.m. on one day, and 10 p.m. on one day. The Act, however, does not specify when shops may be opened. It applies to the Metropolitan district and Newcastle; country shop districts, which include all municipalities in the state other than Sydney and Newcastle, may be brought under the Act by proclamation, and this has been done.

In the year 1900 early-closing laws were enacted in South Australia and in Queensland; in both cases the Acts were close copies of that of New South Wales. In 1897, an Early Closing Act was passed in Western Australia; Tasmania, therefore, is the only state in which there is no law regulating shop hours.

The disastrous strikes which have been spoken of as occurring between 1886 and 1895 were symptoms of an industrial unrest spreading over the whole of the Eastern States and New Zealand. The expenditure of public money on a lavish scale had attracted to these states a larger number of unskilled workers than work could be provided for in ordinary seasons, and even many of the skilled trades were largely overmanned. Under the existing conditions of industrial remuneration a fall in wages was inevitable. The trades unions, however, made a brave stand against any reduction in the wages of their own members, and there can be no question but that up to the year 1888, and in some trades for a year or two longer, their efforts were in the main successful. But the number of workers enrolled in the unions was small compared with the total number of persons following gainful pursuits. The trades unions, too, had an advantage from the fact that the trades which they controlled were skilled trades which required long apprenticeship to learn, and which in the case of a strike could not be swamped by unskilled or partially skilled labour. About the year 1888 the trade unions and others who sympathised with the labour movement, and persons desirous of avoiding further labour conflicts, began to consider very earnestly whether some means might not be taken to regulate the relations of employers and the employed, and so avoid the wasting effects which inevitably follow in the train of

strikes. Several distinct methods of arriving at the same desirable end presented themselves, namely :—

Conciliation, in which the parties to a dispute were brought together without legal compulsion.

Compulsory arbitration.

The regulation of wages by a board representing the employers and employed, with an impartial chairman ;

and each of these systems has been tried in these states since 1888.

The question of conciliation and voluntary arbitration has been before the Australian public for some considerable time. In 1882 Mr. (afterwards Sir George) Dibbs introduced into Parliament a bill for the establishment of a council composed of members of the New South Wales Employers' Union and the Trades and Labour Council, in which conciliation was provided for on the lines of the *Conseils de Prud'hommes* existing in France ; but there was so little parliamentary response that the bill was shelved. In 1887 a scheme based upon English precedent was promulgated by a joint committee of the Victorian Trades Hall Council and the Employers' Union for the establishment of a Board of Conciliation. A similar scheme was drawn up by the joint committee of the New South Wales Employers' Union and the Trades and Labour Council, but was rejected. In the building trade of New South Wales there was for some years a representative Board of Conciliation without any provision for arbitration, and this board is reported to have done very excellent work. In 1887 Mr. J. H. Carruthers introduced a Trades Conciliation Bill, in which the machinery provided was purely voluntary. The measure did not, however, get beyond the stages of a bill. Other schemes of conciliation were proposed, notably one drawn up by the Honorable C. J. Langridge, of Victoria. In South Australia a bill to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes, was introduced into Parliament by the Hon. C. C. Kingston in December, 1890. This measure is the parent of all the conciliation and arbitration laws now in operation in Australia ; the bill met with strong opposition, and it was not until late in 1894 that it was finally passed into law, having been twice rejected by the Legislative Council.

Meanwhile the matter of conciliation had been before the New South Wales Parliament. A commission had been appointed to inquire into the question of strikes, and a report was drawn up and a bill based on the recommendations was drafted and introduced by Sir Henry Parkes on the 5th of August, 1891, but the Government resigned before the bill could become law.

About the same time a measure was before the Victorian Parliament ; it consisted of twenty-three clauses, and did not go much farther than to permit the establishment of councils of conciliation under license from the Crown, as no award could be taken into, or enforced by, any court of law. This measure became law at the commencement of 1892, and has, therefore, the distinction of being the first legislative enactment

of its kind on the statute books of Australia. The Act, however, was not followed by any consequences, good or bad, being entirely ignored by all parties. When Sir George Dibbs succeeded Sir Henry Parkes as Premier of New South Wales he took up the question of trades disputes, and on 31st March, 1892, his Trades Disputes Conciliation and Arbitration Act was assented to. This Act was in force for four years, when it lapsed, very little use being made of it in spite of the strenuous exertions of the officials in charge of its administration.

In New Zealand a Conciliation and Arbitration Bill was introduced in 1892 by the Minister for Labour, the Hon. W. P. Reeves, and was twice rejected by the Legislative Council; it was, however, presented a third time, and became law on the 31st August, 1894. The following is a short epitome of its leading provisions:—

The object of the Act, as declared in the preamble, is to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes by conciliation and arbitration.

A society of not less than seven persons, associated for the purpose of protecting or furthering the interests of employers or workmen, may be registered as an industrial union by complying with certain provisions of the Act. Full and detailed information as to constitution, rules, names of officers and members, etc., must be sent to the Registrar, who will issue a certificate of registry and incorporation. The effect of registration will be to render the industrial or trade union so registered subject to the jurisdiction of the Board and Court appointed under the Act.

The parties to industrial agreement may be—(1) trade unions, (2) industrial unions, (3) industrial associations, (4) employers. Every industrial agreement shall be for a specified time not exceeding three years, and is to be filed in the Supreme Court office within thirty days of making. It is binding on both sides, and if any association or person thus bound fails in carrying it out there is a penalty not exceeding the amount fixed by the agreement, or, if no amount is fixed, not exceeding £500.

“Industrial districts” are to be constituted and gazetted, and for every such industrial district a Board of Conciliation and a Clerk of Awards is to be appointed. The Act defines the powers of the Court and Board and the duties of the Clerk, and provides that, when a dispute is referred to Board or Court, no strike or lock-out may take place until the decision is given. A Board of Conciliation is to consist of not more than six or less than four persons, chosen by the industrial unions of employers and of workmen in the respective districts, and a chairman is to be elected outside the members of the Board. Should a Conciliation Board fail to effect settlement, the dispute may be referred to the Court of Arbitration. There is to be one Court of Arbitration for the whole colony, consisting of three members, one appointed on the recommendation of the council of associations of employers, one on the



recommendation of the council of associations of workmen, and the third a judge of the Supreme Court; every member to hold office for three years, and to be eligible for re-appointment. If any party to a proceeding before the Court fail to appear without cause the Court may proceed *ex parte*. The award is to be made within one month, and may include costs and expenses; but no costs will be allowed for agents, counsel, or solicitors appearing for any party, and it shall be framed in such manner as to express the decision of the Court whilst avoiding technicalities. The award may be enforced in the same manner as a judgment of the Supreme Court. The amount for which an award may be enforced against an association is limited to £500.

The fourth part of the Act provides that the Railway Commissioners and the Amalgamated Society of Railway Servants may be respectively registered, and may refer any industrial dispute between them to the Court of Arbitration, but Boards of Conciliation are to have no jurisdiction in these cases.

So novel a piece of legislation could not be expected to work quite smoothly in the first instance; Amending Acts elucidating the provisions of the original measure were therefore passed in 1895, 1896, and 1898, and the law was consolidated and further amended by the Acts of 1900 and 1901. The amendments of the original Act extend the scope of the jurisdiction of the tribunals of arbitration, and carry the principle of compulsion further than contemplated by the Act of 1894. Non-unionist workmen are brought within the jurisdiction of the Arbitration Court in certain circumstances, as well as clerical employees. Conciliation Boards are made courts of first instance; awards are made permanent in default of a further dispute, and, subject to certain safeguards, awards may have force throughout New Zealand.

It has been mentioned that Mr. C. C. Kingston, when Premier of South Australia, introduced his bill to facilitate the settlement of industrial disputes in December, 1890. Various causes tended to delay the passing of the measure, so that it was not until December, 1894, that it passed both Houses of Parliament and received the Royal assent. In point of time the South Australian measure was introduced before that of New Zealand, but it became law a few months later. The South Australian Act has not been availed of to any large extent, for, unlike the New Zealand law, it allows only registered bodies to appear before the Arbitration Court, and as the trade unions of the state have not registered under the Act, they have consequently remained outside its jurisdiction. South Australia, however, is a state in which trade disputes have not been by any means very virulent, and it is probable that the failure of industrial bodies to invoke the aid of the Arbitration Court has been due to the mildness of the disease and not to the inefficacy of the remedy. -

The movement to provide means of settling disputes was felt also in Queensland, where a bill, on the lines of the *Conseils de Prud'hommes*, was introduced by Sir S. W. Griffith. It was not, however, a

measure dealing with industrial disputes between employers and bodies of employees.

Western Australia passed a Conciliation and Arbitration Act in 1900. The law, however, was superseded in February, 1902, by one approximating very closely to the latest New Zealand law, and this is now in active operation. On 1st January, 1904, there were 17 unions of employers registered under the Act, and 132 unions of workers representing 15,294 persons. The funds at disposal of workers' unions amounted to £13,250.

With the example of New Zealand and South Australia before it, the New South Wales Parliament at the instigation of Mr. B. R. Wise, the Attorney-General, undertook the passing of an Arbitration Act. The first bill was introduced in the middle of 1901, but was rejected by the Council. The bill was afterwards re-introduced, and became law on the 10th December, 1901, an amendment by the Council limiting the law until 1908 being assented to by the Assembly. The New South Wales Act in some respects bears a close resemblance to that of New Zealand, but in other ways there are radical differences. The matter of conciliation was laid great stress upon by the framers of the New Zealand law as it originally stood, and the best exponents of the principle in New Zealand still view it with favour, but the Amending Act of 1891 gave power to either party to an industrial dispute to pass by the Board of Conciliation and go direct to the Court. This permission is invariably acted upon, and has had the effect of practically abolishing the Conciliation Boards. Such being the New Zealand experience the New South Wales Act does not attempt to introduce the principle. The Act provides for the registration of industrial unions of employers and of employees. Any employer or association of employers employing fifty or more hands may be registered as an industrial union, but employees must first register as trade unions, as only trade unions can become industrial unions under the Act. Any dispute in regard to industrial matters, whether between industrial unions, or between an employer and an industrial union of employees, or between an employer and a trade union, may be referred to the Court of Arbitration. It is provided, however, that no person or body of persons other than an industrial union (or in certain cases the Registrar) may refer such dispute to the Court, so that the Act has had the effect of fostering the organisation both of employers and employees, and the formation and registration of industrial unions. The provision for restricting the right of approaching the Court to industrial unions in conjunction with the clause making the passing of a resolution by the members of a union a condition precedent to the referring of a dispute, was intended to protect the Court from being burdened with trivial cases. Before seeking the intervention of the Court, employers must be registered; but they may be cited before the Court as defendants although unregistered. The Court consists of a Supreme Court Judge appointed by the Governor, and two members

elected respectively by the industrial unions of employers and the industrial unions of employees. The prohibition of strikes and lockouts during the reference of any dispute to arbitration is similar to the New Zealand law. The persons who strike or lockout after a dispute has arisen are, in certain circumstances, guilty of a misdemeanour. The Arbitration Court specifically grants the power of fixing the minimum wage, and has also statutory power to give preference to unionists over non-unionists, other things being equal, when men of both classes offer their labour at the same time. The distinctive feature of the New South Wales Act is the provision regarding the common rule. In New Zealand the process of arbitration is for the court to proceed to district after district, citing all the employers in the industry under review before it. Its decisions in a district are confined only to that district. The decisions therefore bind certain specific employers, whereas in New South Wales the decision of the court can be made to apply to all industries of the state, and the court has power to declare that any custom, regulation, agreement, condition, or dealing in relation to any industrial matter shall be a common rule of the industry.

Another important provision not contained in the New Zealand law is that any industrial dispute may be referred to the court by the Registrar, where the parties—or some or one of them—are not industrial unions.

The description of the various Acts in force in reference to conciliation and arbitration must be taken as the merest outline. The student of this important question who is desirous of getting a clear knowledge of the working of the Acts must consult the original authorities on the subject. The descriptions here given are only intended to illustrate a phase of the industrial position which the student of Australian affairs must not lose sight of.

One of the first decisions of the Arbitration Court of New Zealand was to award preference to unionists where such was practicable, and to declare that where preference was not granted employers should not discriminate against unionists. The power of the Court to grant preference was disputed by the employers, but all doubt in regard to the matter was removed by the passing of a specific enactment by the Legislature enjoining preference, the conditions of such being that a union should be practically open to every person employed in the trade who wished to join it, and that there are members of the union unemployed and seeking employment who are equally qualified with non-members to perform the work required to be done. In New South Wales also the general principle of preference to members of unions over non-members is embodied in the law, and such preference has been granted by the Court almost from the outset. In such circumstances the number of members belonging to trades unions became an extremely interesting fact in connection with the working out of the principles of arbitration. In New Zealand on 31st March, 1904, there were 336 workers' unions registered with a membership of

25,354. In Western Australia there were, at the close of 1903, 132 unions of workers with a membership of 15,294.

In New South Wales the number of unionists is much greater than in New Zealand, and allowing for difference of population, is also proportionately greater. The following are the figures for the three years the Act has been in operation :—

INDUSTRIAL UNIONS OF EMPLOYERS.			INDUSTRIAL UNIONS OF EMPLOYEES.	
Year.	Number.	Membership.	Number.	Membership.
1902	109	2,302	85	57,636
1903	119	2,916	124	72,367
1904	118	3,163	128	70,635

The total number of workers in the state in 1904 was 362,396, counting only those of the full age of 21 years and upwards, so that the number of unionists to workers is about 19 per cent. This bare statement of fact is, however, likely to mislead, as there are a large number of workers so placed that no industrial combination has, so far, been possible amongst them. Even amongst trades which are represented by unions membership is often confined to workmen who live in towns. Excluding occupations not represented by unions there are 70,635 unionists to 218,189 adult workers, or 32·4 per cent; but even this statement needs qualifying, for amongst the 218,189 workers are included 37,468 common labourers who would find difficulty in joining a union of fellow workers, and 57,580 agricultural and pastoral labourers to whom the Australian Workers' Union—which is practically a shearers' union—is alone open. Excluding these the number of unionists is reduced to 53,528, and the adult workers corresponding to 123,141. Some of the unions contain every man following the trades they represent, but these are small unions. Amongst the most successful of the larger unions are the various coal miners' unions which have a membership of 9,000 out of 11,000. At the other end of the scale is the grooms' and coachmen's union with a membership of 45 out of 5,223 grooms and coachmen in the state.

The aim of the Conciliation and Arbitration Acts is primarily the prevention of strikes and lockouts. In Victoria the amelioration of the industrial situation was approached in an entirely different manner. It was thought that as the Factories Act provided for the protection of the worker, so far as sanitation, working hours, and the surroundings of the workshop were concerned, if his remuneration was determined by an agreement between the employer and the employed, the occasion for strikes would be avoided. In the Factories Act of 1896, to which allusion has already been made, a bold attempt was made to deal with the difficult problem of industrial remuneration.

In addition to the provisions regarding workshops, the Factories and Shops Act of 1896 enacted that special boards might be appointed to fix wages and piecework rates for persons employed either inside or outside factories in making clothing or wearing apparel, or furniture, or in breadmaking or baking, or in the business of a butcher or a seller of meat, or maker of small goods. The appointment of special boards was also authorised for any process, trade or business usually or frequently carried on in a factory or workroom, provided a resolution has been passed by either House declaring it to be expedient that such a board should be appointed. Special boards, it was provided, might consist of not less than four and not more than ten members with a chairman, the period of office being two years. Half the members were to be elected by the employers as representing their interests, and half by employees. The right of appointment of a chairman of a board rested with the board itself, the chairman not being an elective member, but in the absence of appointment by the board, the Governor-in-Council has power to appoint the chairman. An exception to the principle of election was made in the case of the furniture trade, where the whole of the members of the board were appointed by the Governor, as it was thought undesirable that the election should be made by the trade itself, as the great majority of the workmen in the furniture trade were Chinese. The boards were given power to fix either wage rates or piece work, or both, as well as the hours for which the wage rate was determined and the rate of pay for overtime; to the boards also was given power to determine the proportion of apprentices or improvers to skilled workmen employed in any process, trade or business, as well as the wage to be paid to them. When a board had determined the minimum wage, manufacturers were allowed to fix the piece-work rates, provided that these rates were based on such minimum wage, and as a check on imposition, it was provided that the Chief Inspector of Factories should have the right to challenge any piece-work rate and submit the matter to the board. Provision was also made for the granting of licenses to aged and infirm workers, who were permitted to work at less than the minimum wage fixed by the board. Agreements in contravention of the decision of the board were held to be null and void, and an employee might sue for his wages as determined by the Wages Board, any agreement to the contrary with his employer notwithstanding. It was further enacted that any person employed in a factory should receive at least 2s. 6d. a week, and that no premium or bonus was to be charged directly or indirectly for engaging or employing any female apprentice or improver in making articles of clothing or wearing apparel.

The Act was not a permanent enactment; it was first passed in 1896, re-enacted with some amendments in 1900, and continued until September, 1902, when it lapsed on the dissolution of Parliament. At the time of the expiry of the Act there were thirty eight special boards in existence. When Parliament met after the elections, amongst the first

bills introduced was one to revive and continue in force the Factories and Shop Acts and all regulations thereunder, as well as the determinations of the special boards. The lapsed laws, with some modification in regard to special boards, were continued until the 31st October, 1903, and before that date an Act was passed continuing the then existing law until the 31st December, 1905. The Act continued the old laws but modified them in certain important particulars, and constituted a court, consisting of a Supreme Court judge, to hear appeals against determinations of special boards, and for dealing with references in regard thereto by the Minister. Under the amended Act a resolution of both Houses of Parliament is required for the establishment of a special board, not, as originally provided, the resolution of either House. As regards the boards themselves, an important provision has been introduced to the effect that the representatives of employers shall be actual employers, and the representatives of employees shall be actual employees, in the trade concerned, and the term of office was made three years instead of two, as in the original enactment. The principles of future determination as to wages and rates were laid down as follows :

- (a) The board shall ascertain as a question of fact the average prices or rates of payment (whether piece-work prices or rates or wages prices or rates) paid by reputable employers to employees of average capacity ;
- (b) The lowest prices or rates as fixed by any determination shall in no case exceed the average prices or rates as so ascertained ;
- (c) Where the average prices or rates so ascertained are not in the opinion of the special board sufficient to afford a reasonable limit for the determination of the lowest prices or rates which should be paid, they may so report to the Minister, who shall in such case refer the determination for the consideration of the Court, and the Court in that event may fix the lowest prices or rates to be paid without having regard to the provisions of subsection (b) ;
- (d) Where it appears to be just and expedient, special wages prices or rates may be fixed for aged, infirm, or slow workers.

The effect of the provisions of the Factories and Shops Act in regard to the industrial conditions of Victoria has been much discussed. For detailed information on the subject the enquirer should consult the Reports of the Chief Inspector of Factories, and the Report of the Royal Commission on the operation of the factories and shops law of Victoria, dated February 19th, 1903. The apparent results so far as concerns the wages of operatives are considerable. Taking the operatives in trades in respect of which determination as to wages were arrived at, and confining the comparison to persons 20 years of age and upwards, it will be found that there has been a substantial increase as between the wages of 1895, the year preceding the passing of the provisions of the law relating to wages boards, and those of 1902, which is the last complete year during which these provisions were in full operation.

Seventeen trades are shown in the following list; in fifteen of these wages were increased substantially. The greatest proportionate advance was in the furniture trade, the earnings of Europeans having been advanced from £1 9s. 3d. per week to £2 8s. 7d., or by 66 per cent., and of Chinese from £1 1s. 10d. per week to £2 7s. 11d., or by 119 per cent. There were large increases also in the following employments, viz., engraving and die-sinking, brickmaking and pottery, harness and saddlery, jewellery and electroplating, boots and shoes, and bread, biscuit, and confectionery, and smaller, though still important, increases in printing, stationery, &c., brushmaking, clothing, cooperage, and malting. Two industries show a slight reduction in the average wages paid.

It will be understood, in considering these figures, that they are based upon the actual payments made by the factories of the state, and not upon the decisions of the various wages boards, which cannot be translated into percentages of increase or decrease; in any circumstance the decision of a wage tribunal determines only the minimum wage, and the average wages paid may perchance be something quite different.

Taking the seventeen trades enumerated, the average movement of wages in the seven years was from £1 18s. 4d. to £2 6s. 5d., that is to say, an increase of 8s. 1d., or 21 per cent. The trades comprised in this and the following lists are those wherein over fifty hands were employed at each period.

MALES 20 YEARS AND UPWARDS—INDUSTRIES UNDER SPECIAL BOARDS.

Class of Trade.	Average weekly wage.		Movement.	
	1895.	1902.	Increase per cent.	Decrease per cent.
	£ s. d.	£ s. d.		
Boots and shoes .....	1 15 10	2 3 5	21	.....
Bread, biscuits, and confectionery .....	1 15 2	2 5 7	30	.....
Brewing .....	2 4 9	2 1 6	.....	7
Brickmaking and pottery .....	1 12 4	2 6 1	43	.....
Brush and broom-making .....	1 14 6	1 19 2	14	.....
Clothing .....	2 1 1	2 6 9	14	.....
Cooperage .....	2 0 11	2 6 6	14	.....
Engraving, die-sinking .....	1 17 10	3 4 9	71	.....
Furniture (European) .....	1 9 3	2 8 7	66	.....
„ (Chinese) .....	1 1 10	2 7 11	119	.....
Harness, saddlery .....	1 15 4	2 5 3	28	.....
Jewellery, electroplating .....	2 2 9	2 13 11	26	.....
Malting .....	2 1 2	2 6 11	14	.....
Printing, stationery, bookbinding .....	2 5 0	2 13 8	19	.....
Shirt-making .....	2 3 1	2 0 0	.....	7
Tanning .....	1 16 0	1 19 11	11	.....
Woollen manufactures .....	1 15 7	1 19 1	10	.....

In eight industries comparison may be made as to the wages paid to females, of 20 years and upwards, employed in trades working under special boards. This the following table affords. It will be seen that in four trades there have been substantial increases, in two trades wages have remained practically stationary, and in other two there have been large reductions. Grouping the eight trades together, the movement of wages in the seven years was from 17s. 9d. to 20s. 1d., or 13 per cent.

Class of Trade.	Average weekly wage.		Movement.	
	1895.	1902.	Increase per cent.	Decrease per cent.
	£ s. d.	£ s. d.		
Boots and shoes.....	0 16 9	1 1 0	25	.....
Bread, biscuits, confectionery .....	0 18 6	0 14 9	.....	20
Brushes, brooms, &c. ....	0 15 11	0 15 5	.....	3
Clothing .....	0 18 1	1 1 9	20	.....
Furniture (European) .....	0 18 2	1 1 6	18	.....
Printing trades .....	0 15 0	0 15 8	4	.....
Shirt-making .....	0 18 8	0 16 1	.....	14
Woollen mills.....	1 0 3	1 3 4	15	.....

Taken as a whole, the trades not placed under special boards showed higher average remuneration for adult male workers in 1895 than did the trades that were so placed. Taking twenty-six trades included in the list given hereunder, the average wages in 1895 was 40s. 1d., as compared with 38s. 4d. paid, in the same year, to trades placed under special boards; in 1902 the comparison was 42s. 3d. as against 46s. 5d., the advantage being on the side of trades working under special boards. In thirteen out of the twenty-six trades shown in the list, wages remained stationary, or were within less than 5 per cent. of what they had been in 1895; in three cases there were reductions, and in ten cases there were increases; the whole movement, however, represented an advance of 2s. 2d., or 5 per cent. The most substantial increases appear in works for preserving meat or fruit, in which the advance was 47 per cent., and in ice and refrigerating, 17 per cent.; as regards the former, it is possible the increase is merely apparent, as establishments where fruit is preserved were omitted from the official returns of 1902.



The largest decrease was in works for making chemical manures, and in bone-mills.

MALES 20 YEARS AND UPWARDS—INDUSTRIES NOT UNDER SPECIAL BOARDS.

Class of Trade.	Average weekly wage.		Movement.	
	1895.	1902.	Increase per cent.	Decrease per cent.
	£ s. d.	£ s. d.		
Ammunition .....	2 14 3	2 9 5	.....	9
Aerated waters .....	1 13 2	1 13 10	2	.....
Bacon-curing .....	2 1 11	2 2 10	2	.....
Candles—soap and tallow .....	1 15 9	1 17 9	6	.....
Carriages, waggons, &c. ....	1 16 10	2 1 7	13	.....
Chaff-cutting .....	1 14 1	1 17 1	9	.....
Chemicals, gum refining, &c. ....	1 17 1	1 18 0	2	.....
Chemical manures, bone mills, &c. ....	2 13 1	1 19 7	.....	25
Electric light .....	2 4 10	2 7 9	6	.....
Fellmongeries .....	1 15 11	1 19 6	10	.....
Flour mills .....	2 2 4	2 5 1	6	.....
Iron foundries, brass and copper works, ovens, &c. ....	2 1 11	2 4 9	7	.....
Glass bottles .....	2 6 1	2 4 3	.....	4
Grocers' sundries .....	1 18 1	1 17 10	.....	1
Hosiery .....	2 2 0	2 1 9	.....	1
Ice and refrigerating .....	2 4 3	2 11 10	17	.....
Hats and caps .....	2 9 0	2 10 8	3	.....
Leather fancy goods.....	1 17 2	1 17 1	.....	.....
Preserving works—meat, fruit, &c. ....	1 11 9	2 6 9	47	.....
Rope and twine .....	1 17 2	1 18 8	4	.....
Sugar refining .....	2 4 6	2 5 6	2	.....
Tinware .....	1 15 10	1 16 11	3	.....
Umbrellas .....	2 2 0	2 2 7	1	.....
Waterproof clothing.....	1 16 1	2 0 7	12	.....
Wireworks .....	1 18 0	1 16 1	.....	5
Tobaccos, cigars, cigarettes .....	1 18 10	1 19 6	2	.....

A comparison of the wages paid to women working in industries not under special boards for the years 1895 and 1902 shows considerable advances in some industries: for example, wages have increased 20 per cent. in the tobacco industry, and from 15 to 17 per cent. in the hatting industry, hosiery, and umbrella making. Other industries have held their own, excepting establishments making mantles, millinery and underclothing, in which wages have declined 15 per cent. Ten classes of industries are enumerated in the following list; the movement of wages for all taken together is from 17s. 6d. per week in 1895, to 17s. 10d. in 1902. It will be seen, therefore, in working out an average, that the employment in establishments making mantles, millinery, and

underclothing is so extensive that a decline of 15 per cent. in the wages of women employed therein counterbalances the increases in other trades.

FEMALES 20 YEARS AND UPWARDS—INDUSTRIES NOT UNDER SPECIAL BOARDS.

Class of Trade.	Average weekly wage.		Movement.	
	1895.	1902.	Increase per cent.	Decrease per cent.
	£ s. d.	£ s. d.		
Ammunition .....	0 13 6	0 13 11	3	.....
Dressmaking .....	0 15 11	0 16 11	6	.....
Grocers' sundries .....	0 14 6	0 14 9	2	.....
Hosiery .....	0 14 9	0 17 5	17	.....
Hats and caps .....	0 17 1	0 19 7	15	.....
Mantles, millinery, underclothing, &c....	1 1 7	0 18 5	.....	15
Rope, twine, &c. ....	0 13 8	0 14 0	2	.....
Umbrellas .....	0 15 9	0 18 5	17	.....
Waterproof clothing.....	0 18 8	0 19 9	6	.....
Tobacco, cigars, and cigarettes .....	0 17 6	1 1 1	20	.....

It will be seen that the wages determined for male workers by the special boards are uniformly lower for boys and youths than in the non-regulated factories; but for adult workers the wages are higher, and for females the regulated wages are in every case higher. For all male workers the average in regulated trades is £1 15s. 9d., compared with £1 11s. 1d. in other trades, showing a difference of 4s. 8d. per week; this is higher than an inspection of the figures in the foregoing table would lead one to expect, and is due to the fact that in the regulated trades three-fourths of all workers are adults, whereas in other trades the proportion is not more than three-fifths.

The amendments in the minimum wage law of Victoria made by the Act of October, 1903, will probably modify in some degree the tendency of Special Boards to raise wages, but the law even as it now stands embodies so much that is novel and important in industrial legislation that its working is being watched with very keen interest both in Australia and in Europe and America. Nor is the interest lessened by the fact that while in Victoria and South Australia the principle of the legal establishment of the minimum wage is in operation, side by side as it were, in New South Wales, Western Australia, and New Zealand the essentially different system of conciliation and compulsory arbitration is at work to prevent the occurrence of strikes and lockouts, and regulate the earnings of all classes of labour.

The admirable publications of the New Zealand Statistical Department show the wages in various trades at intervals since 1891, and

from these the following summary has been deduced, which gives the average weekly earnings of employees in the various factories and works of the colony at the last three census periods :—

Year.	Weekly Earnings.	
	Males.	Females.
	s. d.	s. d.
1891 .....	29 0	13 4
1896 .....	29 9	11 6
1901 .....	31 5	12 5

It will be seen that the average earnings both for males and females is less in New Zealand than in New South Wales and Victoria. In the absence of the ages of the workers in New Zealand, however, it is impossible to go beyond the statement of the average earnings. As the table shows, the average rate for males has increased by 2s. 5d. per week, which is equivalent to  $8\frac{1}{2}$  per cent. ; the earnings of females, on the other hand, are slightly lower than they were in 1891.

A comparison of the average wages paid to workers of various ages (*a*) in trades regulated by Special Boards in Victoria, and (*b*) other factory workers, is interesting reading.

Age of Worker.	Trades under Special Boards.		Other Trades.	
	Males.	Females.	Males.	Females.
Years.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
13	0 6 1	0 4 0	0 6 6	0 3 7
14	0 6 6	0 4 4	0 7 6	0 4 3
15	0 7 7	0 5 1	0 8 9	0 4 5
16	0 9 0	0 6 5	0 10 8	0 5 6
17	0 11 8	0 8 4	0 13 0	0 7 1
18	0 14 8	0 11 4	0 16 4	0 8 10
19	0 18 7	0 12 8	0 19 4	0 10 7
20	1 2 11	0 15 4	1 2 8	0 11 10
21 and upwards	2 4 3	0 19 9	2 1 11	0 17 5
All ages .....	1 15 9	0 15 11	1 11 1	0 12 8

As already explained, the Arbitration Act of New South Wales has not been in force sufficiently long to admit of statistics being obtained as to its probable effect upon wages; but the average weekly rates of pay for males and females engaged in the various manufactories and works of the state in the years 1900 to 1903 are given below:—

Age.	1900.	1901.	1902.	1903.
Males.				
13 years .....	£ s. d. 0 6 5	£ s. d. 0 6 9	£ s. d. 0 6 11	£ s. d. 0 6 2
14 „ .....	0 6 9	0 7 5	0 7 3	0 7 4
15 „ .....	0 7 9	0 8 2	0 8 6	0 8 6
16 „ .....	0 9 3	0 9 10	0 10 1	0 10 2
17 „ .....	0 11 8	0 12 7	0 12 5	0 12 7
18 „ .....	0 15 4	0 16 4	0 16 0	0 16 4
19 „ and over .....	2 0 2	2 2 0	2 2 8	2 2 11
Females.				
13 years .....	£ s. d. 0 4 7	£ s. d. 0 4 4	£ s. d. 0 5 0	£ s. d. 0 5 5
14 „ .....	0 4 0	0 4 1	0 4 8	0 4 5
15 „ .....	0 4 3	0 4 9	0 4 10	0 4 10
16 „ .....	0 5 10	0 6 7	0 6 6	0 6 4
17 „ .....	0 7 5	0 8 2	0 8 7	0 8 5
18 „ .....	0 9 4	0 10 5	0 10 5	0 10 7
19 „ and over .....	0 15 9	0 17 2	0 17 4	0 17 7

It will be seen that in the interval of three years there has been an upward movement of wages, both for males and females. This movement cannot, however, be attributed to the operation of the Arbitration Act, seeing that it was chiefly effected in 1901, the year preceding the passing of that Act.

As schemes of industrial conciliation and arbitration are only workable in connection with trade unions, it is interesting to know the membership of trade unions throughout Australia and New Zealand. Returns have been received from the registries of trade unions in each state setting forth, as far as possible, the membership of trade unions existing on the 1st January, 1904. These are shown in the following list, which is official for all the states except South Australia, and for this last state, an unofficial estimate has been made:—

New South Wales	...	...	...	...	70,622
Victoria	...	...	...	...	7,942
Queensland	...	...	...	...	4,681
South Australia	...	...	...	...	7,300
West Australia	...	...	...	...	10,047
Tasmania	...	...	...	...	34
Commonwealth	...	...	...	...	100,626
New Zealand	...	...	...	...	25,354
Australasia	..	...	...	...	125,980

It will be seen that only in New South Wales, Western Australia and New Zealand is there any large registration of trade unions, and it is in these states that the principles of compulsory arbitration are in force. The vivifying effect of compulsory arbitration upon trade unions is exemplified by the case of New South Wales, where, prior to the passing of the compulsory Arbitration Act, the total number of persons belonging to unions was less than 20,000, as compared with 70,000 at the present time. The figures refer to registered trade unions. There may be other unions which have not taken advantage of the law to register themselves, but the membership of such non-registered trade unions cannot be very great in the states where compulsory arbitration is in force. In Victoria the number of registered unions is only 7, and the membership 7,942. The total strength of the unions is, however, much greater, for registration is the exception and not the rule in that state. According to the report of the Trades Hall Council there were, on the 30th June, 1904, 77 trades societies belonging to or affiliated to the Council, and there were in addition to these the Trades Councils of Ballarat and Bendigo, which are independent bodies, unconnected with the Melbourne Council.

Towards the close of the year 1904 an Act was passed by the Federal Parliament to give effect to the powers of the Constitution (section 51, sub-section 35) with respect to conciliation and arbitration for the prevention and settlement of disputes extending beyond the limits of any one state. "Industrial dispute" is defined as a dispute in relation to industrial matters extending beyond the limits of any one state, including disputes in relation to employment on state railways, or to employment in industries carried on by or under the control of the Commonwealth or a state or any public authority constituted under the Commonwealth or a state, but it does not include a dispute relating to employment in any agricultural, viticultural, horticultural, or dairying pursuit. Preference to unionists may be given where, in the opinion of the Court, the application for such preference is approved of by a majority of those affected by the award who have interests in common with the applicants.

It will probably be some little time before the Act can be put into operation, and its effect on the industrial situation will be most keenly watched