

GEOGRAPHY AND HISTORY
OF
NEW SOUTH WALES
BY
WILLIAM WILKINS

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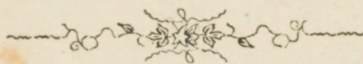
HISTORY

OF

NEW SOUTH WALES.

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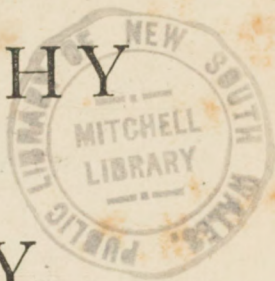


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PREFACE

TO THE FIRST EDITION.

IN the compilation of this little work, the writer has constantly had in view the production of a treatise on the geography of the colony, which, while not altogether devoid of interest to the general reader, should be specially adapted for the use of Teachers and the higher classes in schools. It is therefore essentially of a popular character. An attempt is certainly made to exhibit the Geography of New South Wales as fully and completely as the geography of his native land is taught to an English boy, in a well-conducted primary school in the mother country : but no claim is set up to original scientific research, nor even to strictly scientific treatment of the subject. Independently of other important considerations, the difficulties in the way of treating the geography of the colony in a thoroughly scientific manner are, in the present state of our knowledge, well nigh insurmountable. Even in procuring material for this work, much trouble was experienced in the verification of

some of the statements ; and, owing to the scantiness of published sources of information, the writer is prepared to admit that considerable modifications may hereafter be found necessary in some of his positions.

It is proper to mention that, in a few instances, an extended meaning has been given to names in current use. In excuse for this procedure, it may be urged that the writer was compelled either to adopt such a course, or invent new designations for certain physical features. The inexpediency of the latter alternative is obvious. Aboriginal names have been preferred whenever their retention was not likely to cause mistake or confusion. Such names, in the course of another half century, will probably be the sole relics of the original possessors of the country : and there seems to be a peculiar appropriateness in preserving the native appellations of physical features. The names of towns could, with like propriety, indicate the presence of the intruding race.

The principal authorities consulted by the writer are the work of Strzelecki, and the valuable Reports of the Rev. W. B. Clarke. To the latter gentleman he is further indebted for additional information, kindly given in reply to special inquiries. His thanks are also due to the Honorable the Secretary for Lands,

for the gift of a map of the colony corrected to the latest date, and containing the newest information. Much assistance was likewise rendered by the Publisher of this volume, in enabling the writer to consult various works of reference on similar and collateral subjects.

Sydney, 6th January, 1863.

PREFACE

TO THE SECOND EDITION.

IN preparing this edition for the press, the compiler has endeavoured to verify and where necessary to correct such of the original statements as appeared to be at all doubtful, and to include such additional information as would bring the entire work into accordance with the present state of our knowledge.

The chapter on topography has been considerably enlarged ; but the most important feature of this issue is a compendium of the history of the colony from the date of its first settlement to the present time. This brief record will, it is hoped, supply a want hitherto much felt, and afford the youth of the colony the means of learning much that is worth remembering in connection with the past of their native land.

Sydney, August, 1871.

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GEOGRAPHY

OF

NEW SOUTH WALES.

CHAPTER I.

OUTLINE.

1. NAME.—The name of New South Wales was originally conferred upon the whole of the eastern division of Australia by its first explorer, Captain Cook, who, when examining the coast on his first voyage in 1770, fancied its aspect resembled that of South Wales. But the title is now restricted to the territory lying along the southern half of the east coast.

2. POSITION.—In general terms, New South Wales may be said to lie between the parallels of 28° and 37° south latitude; and between the 141st and 154th meridians of east longitude. As regards distance from the equator, it may be compared to Cape Colony, Chili, and the lower basin of the La Plata, in the southern hemisphere; and with the south of Spain,

Italy, and Greece, which occupy similar positions on the north of the Line. To these may be added the north of Africa, Asia Minor, Syria, Persia, China, and the southern portions of the United States, all of which countries lie in a corresponding latitude, north of the equator. The extreme points are—

<i>North</i> —Point Danger	Latitude,	28° 10' S.
	Longitude,	153° 29' E.
<i>East</i> —Cape Byron	Latitude,	28° 27' S.
	Longitude,	153° 37' E.
<i>South</i> —Cape Howe	Latitude,	37° 28' S.
	Longitude,	150° 8' E.

It is evident, therefore, that New South Wales extends over about nine degrees of latitude, and about twelve and a half degrees of longitude.

3. BOUNDARIES.—New South Wales is bounded on the north by Queensland, from which it is separated by Macpherson's Range, the Dividing Range, the Dumaresq River, the Karaula River, and the 29th parallel of South latitude; on the East, by the Pacific Ocean; on the South by Victoria, being divided from that colony by a line drawn from Cape Howe to the head of the River Murray, and also by that river; and on the West, by South Australia, the line of separation being the 141st meridian of east longitude.

4. FORM AND DIMENSIONS.—If lines were drawn upon a map of New South Wales so as to connect its

extreme points, a space would be enclosed having the shape of a trapezium. It would also be seen that the southern boundary is the most irregular, and deviates most widely from a straight line. The extreme points are Point Danger, the most northern point on the coast; Cape Howe, the most southern; the intersection of the Murray River by the 141st meridian and the intersection of the same meridian with the parallel of 29° S. The greatest length of New South Wales is 900 miles, and is measured on a line drawn from Point Danger to the point where the meridian of 141° E. intersects the course of the Murray. The average length, however, from north to south, does not exceed 500 miles. The extreme breadth, measured from Cape Howe to the point of intersection of the parallel of 29° S. with the 141st meridian, is somewhat less than 850 miles, while the average breadth, from east to west, reaches about 500 miles. It is estimated that New South Wales occupies a superficial area of 323,437 square miles. This country is therefore nearly three times the size of Great Britain and Ireland, and is considerably larger than any European State, except Russia. It is one and a half times the size of Turkey, or of Spain and Portugal, and equal in area to France, together with Belgium, Holland, and all the minor German States. New South Wales is also nearly equal in extent to Canada.

5. COAST LINE.—The length of the coast line, including the principal bays and estuaries, is about

800 miles. The proportion of coast to surface is 1 mile of the former to 404 of the latter. In England the proportion is 1 in 32, and in France, 1 in 136 miles. Generally speaking, the coast presents a bold and rocky front to the ocean, often rising into cliffs two or three hundred feet in elevation. Frequently the elevated parts of the coast alternate with low sandy beaches varying in extent. Between Point Danger and Cape Byron the coast trends south east; thence to Sugarloaf Point, south by west; from that point to Twofold Bay, S.S.W.; and thence to Cape Howe, east and south. Few indentations or projections of conspicuous size occur, although there are numerous small bays and harbours; and along the whole coast line comparatively few rocks or shoals are to be found, but deep water exists everywhere.

6. PROJECTING POINTS.—The principal projections of the land are the following:—

Point Danger—Lying a little to the south of the 28th parallel.

Cape Byron—Named after the unfortunate Admiral Byron; it lies in E. Longitude $153^{\circ} 37'$, and is consequently the most easterly point in the mainland of Australia.

Smoky Cape—A little to the north of the parallel of 31° S., and near Trial Bay; it was so designated by Cook, from the circumstance of his having observed on it fires producing a great quantity of smoke.

Korogoro Point—A little to the south of Smoky Cape.

Tacking Point—Near the mouth of the Hasting River, midway between the parallels of 31° and 32° S.

Indian Head—A bluff headland, to which Cook gave this name, from the number of aborigines observed upon it.

Crowdy Head—Near the entrance to the Manning River.

Cape Hawke—Latitude $32^{\circ} 14'$ S., near the entrance to Wallis' Lake.

Sugarloaf Point—About ten miles south of Cape Hawke, and opposite to the Myall Lake.

Point Stephens—Near the entrance to Port Stephens.

Broken Bay Heads—At the entrance to that inlet.

Port Jackson Heads—At the entrance of the harbour.

Cape Banks—At the northern side of the entrance to Botany Bay; named after Sir J. Banks, who accompanied Cook on his first voyage.

Cape Solander—At the southern side of the entrance to Botany Bay; named after Dr. Solander, botanist to the expedition under Cook.

Point Bass—In the Illawarra district; named after Mr. Bass, the discoverer of the Strait bearing his name.

Black Head—Farther south; probably so called from its dark appearance.

Point Perpendicular—At the entrance to Jervis' Bay, on the northern side, in Latitude $35^{\circ} 10'$ S. The perpendicular appearance of the cliffs probably suggested the name.

Cape George—Between Jervis' Bay and Sussex Haven

It was so called by Cook from having been discovered on St. George's day.

Point Upright—North of Bateman's Bay.

Green Cape—South of Twofold Bay.

Cape Howe—Situated in Latitude $37^{\circ} 28' S$.

7. INDENTATIONS.—Among the more important indentations on the coast are :—

Shoal Bay—The estuary of the Clarence River.

Trial Bay—Near the mouth of the Macleay River.

Port Macquarie—The estuary of the Hastings River.

Crowdy Bay—Between Indian Head and Crowdy Head.

Harrington Inlet—At the mouth of the Manning River.

Port Stephens—A little to the north of the 2nd parallel—
—an extensive inlet forming an excellent harbour.

Port Hunter—An inlet formed by the estuary of the Hunter River, about $33^{\circ} S$.

Broken Bay—In Latitude $33^{\circ} 33' S$. ; discovered by Cook.

Port Jackson—So named by Cook from its discoverer.

Botany Bay—In Latitude $34^{\circ} 6' S$. It received this appellation on account of the profusion of flowers found on its shores by the discoverers.

Port Hacking—A small inlet, a few miles to the south of Botany Bay.

Jervis Bay—In Latitude $35^{\circ} 6' S$. An extensive sheet of water nearly enclosed by the land.

Sussex Haven—A little to the south of Jervis' Bay.

Bateman's Bay—At the mouth of the Clyde River.

Wuross River—The estuary.

Mogoreka—Estuary of the Bega River.

Twofold Bay—Near the southern boundary of the colony.

8. LAGOONS.—In addition to these inlets, there are several sheets of water, which, being very nearly surrounded by land, and having extremely narrow openings into the ocean, are popularly styled *Lakes*, though *Lagoons* would be a more correct title. Among the more conspicuous of these are—

Camden Haven—Named after Lord Camden, a little to the south of Port Macquarie.

Queen's Lake—A little to the south of Camden Haven.

Watson Taylor's Lake.—South of the preceding

Vallis' Lake } Between the Manning and Hunter
Myall Lake } —Rivers, near Cape Hawke and Sugar-
loaf Point.

Lake Macquarie } Between the Hunter and Hawkes-
Puggerah Lakes } —bury Rivers.

Lake Illawarra—In the district of Illawarra.

Lake Cudmirra—South of Jervis' Bay.

Junjurong Lake—A little further south.

Merimbula Lake—A little north of Twofold Bay.

9. ISLANDS.—With the exception of Norfolk Island and Howe's Island which are not geographically

connected with New South Wales, the islands belonging to the colony are few and unimportant, being, for the most part, mere rocks. The more noted of these are—

Solitary Islands—A group of rocky islets lying south of the 30th parallel.

Broughton Islands—Near Port Stephens.

Bird Island—A little north of Broken Bay.

Five Islands—Near the Illawarra district.

Montague Island—South of the 36th parallel.

CHAPTER II.

PHYSICAL FEATURES OF THE LAND.

10. SURFACE.—In general terms, the surface of New South Wales may be divided into three portions. The first consists of a narrow slip of undulating country lying along the coast, and averaging only thirty miles in width. Proceeding westward, we next arrive at a high plateau region of inconsiderable breadth, extending from north to south throughout the colony, parallel to the coast, but divided, in about 32° south latitude, into two distinct portions, by the valley of the Hunter River. Westward of the table land lie vast plains, which constitute the third and largest portion of the colony. These plains stretch westward, with few interruptions, to the mountain ranges which lie near the western boundary of the colony. For convenience of reference, these different portions may be thus named:—

1. The Coast District.
2. The Table Lands.
3. The Great Plains.

New South Wales closely resembles, in physical conformation, the countries on the other side of the Pacific, except that in South America the natural features are

on a grander scale. In each case we find a narrow strip of coast territory, then table lands traversed by long mountain chains and sloping gradually down to vast interior plains.

11. TABLE LANDS.—The Table Lands furnish the key to the physical conformation of the country. As before stated, they are two in number—the northern and the southern. It will appear in the sequel that there is, in their position and general characteristics, a kind of symmetry, or correspondence, that is somewhat remarkable. The Northern Table Land extends for some distance into Queensland on the north, where it attains the greatest elevation, and stretches southward as far as the parallel of 30° , and the sources of the Manning River. It commences at an average distance of thirty-five miles from the coast, extending to the west as far as the 151st meridian. This table land has an average elevation of 2500 feet above the sea, but some parts rise much higher, attaining the altitude of 3700 feet. The Southern Table Land commences on the south side of the Hunter River Valley, and extends beyond the southern boundary of the colony, into Victoria. It has a general slope from south to north, the highest portion, in the colony, being near the southern extremity. On the whole, its elevation is rather less than that of the Northern Table Land, the average being about 2200 feet. The two table lands resemble each other in being

higher at their distant extremities than at the points where they approach each other; in having nearly the same average elevations; in their average width and distance from the sea; and in their general appearance. Further, both present a steep, and even precipitous, face to the eastward, while the slope to the westward is long and gradual. The surface is greatly diversified, sometimes stretching out into extensive level upland plains, but often crossed by ranges of hills, which are, in some cases, rounded and undulating, and in others rugged and steep. Among the more level tracts in the Northern Table Land, are the Darling Downs, Barney Downs, Beardy Plains, and Byron Plains.* In the Southern Table Land are Bathurst Plains, Goulburn Plains, Yass Plains, and the Maneroo Plains or Brisbane Downs. The latter are elevated downs, consisting of a series of gentle undulations, well watered, lightly timbered, and possessing a fertile soil; but from their height and exposed surface the climate in winter is severe. The Table Lands are connected by a chain of mountains running throughout their entire length, and sending off spurs in various directions. It is these spurs from the main range that diversify the surface of the table-lands, and form the watersheds of the various streams by which they are drained.

* The term "plain" is, in New South Wales, indiscriminately applied to cleared land in any situation. A "plain," in Geography, is a level tract of land slightly raised above the level of the sea. The "plains," so called upon the table-land, would be more appropriately named "downs."

12. MOUNTAINS.—The mountain system of New South Wales is, generally speaking, simple. It consists of 1st, The Great Dividing Chain, and its lateral branches; 2nd, The Coast Ranges; 3rd, Ranges of the Interior; and 4th, Isolated Peaks and Groups. It may be remarked of the mountains of this country, that although they do not attain an elevation at all corresponding to their extent, yet they are frequently remarkable for their steepness.

13. THE GREAT DIVIDING CHAIN.—This chain forms a portion of an immense cordillera, stretching without interruption throughout the whole length of the Eastern and South-eastern coasts of Australia, and forming through its whole extent the main watershed of the country. In this respect the similarity between the physical conformation of the eastern portion of the colony and that of the opposite coast of South America, is especially remarkable. In both cases, a range of mountains runs along the whole length of the continent in close proximity to the coast; and both chains, in accordance with the general law, present their more precipitous sides to the sea. With a few variations to be noted hereafter, the general direction of the Great Dividing Chain is from North to South, parallel to the coast. The appearance and structure of the chain exhibit several important variations. Where granite is the prevailing rock, the summits are rounded, seldom forming into prominent peaks. Where sandstone is the chief component, the

mountains are flat-topped with precipitous sides ; and where trap rocks exist in any quantity, sharp ridges and pointed peaks are to be found. In general, the Dividing Chain intersects the two table lands, though it sometimes, as in the case of the Blue Mountains, lies along the eastern edge. The average elevation is about 3500 feet, though some peaks are much higher. For example, Ben Lomond is 5000 feet in altitude ; Capoompeta, 4730 ; while the culminating point, Mount Kosciusko, attains an elevation of 7308 feet. It will be observed that the line of perpetual snow does not, in this latitude, descend below 8000 feet above the sea level, and that, consequently, snow will not, as a rule, remain upon the mountains during the whole year. Various names have been conferred upon different portions of the chain ; and, for the sake of convenience, these appellations will be preserved, with some slight extension in their application. With this view, the Great Dividing Chain may be thus subdivided :—1. New England Range ; 2. Liverpool Range ; 3. Blue Mountain Range ; 4. Cullarin Range ; 5. Gourock Range ; 6. Monaro Range ; and 7. The Muniong Ranges.

14. THE NEW ENGLAND RANGE.—This portion of the main Dividing Chain commences at the northern boundary of the colony, and extends nearly as far south as the 32nd parallel. It is of varying character and elevation in different parts ; but its average height may be estimated at 3500 feet. Some of its offsets

are, at least, of equal altitude. The culminating point is Ben Lomond, 5000 feet.

Various lateral ranges branch off from the main chain, both towards the east and west. The eastern spurs serve as watersheds to the streams flowing into the Pacific, and give to the Coast District its varied and undulating surface. The first of these lateral branches, called *Macpherson's Range*, lies between the basins of the Logan on the north, and the Clarence and Richmond on the south. It is of a precipitous and inaccessible character, and is, therefore, well fitted to form the boundary between two colonies. The highest summit is Mount Lindsay, 5700 feet.

Macleay Range.—This range separates the basins of the Clarence and Macleay. It is rugged and inaccessible, though it does not, as far as it is yet known, contain any peaks of remarkable elevation. It branches from the New England Range near Chandler's Peak, and terminates near the coast.

Nundewar (or Hardwick) Range.—The spurs on the west of the Dividing Chain have a general north-west direction. One of the most important of these is the Nundewar Range, which runs for a considerable distance, starting from near the southern extremity of the New England Range, and preserving the north-westerly direction. At a point near its termination, it has a height of about 3000 feet above the sea level.

Hastings Range.—The watershed between the Macleay and the Hastings Rivers is formed by this range which, in its upper portions, is very lofty and rugged. One of the peaks, Mount Sea View, is said to attain an elevation of 6000 feet above the sea.

The Moonbi Range.—This range branches off to the westward nearly opposite to the preceding, and runs in a general north westerly direction, separating the waters of the Maluerindi from those of the Peel. Its culminating point is 3593 feet in elevation.

15. THE LIVERPOOL RANGE.—The second portion of the main Dividing Chain is the Liverpool Range, so named by the explorer, Mr. Oxley, after Lord Liverpool. It commences at the termination of the New England Range, and runs in a general westerly, though circuitous, course for about 150 miles, separating the Valley of the Hunter from Liverpool Plains, and connecting the two Table Lands. The Liverpool Range consists of a chain of rugged mountains, rising into lofty detached peaks, of a height varying from 3000 to 4000 feet, and sometimes attaining an elevation of nearly 5000 feet; the highest, perhaps, being Oxley's Peak. The most remarkable summit in this range is, probably, the burning mountain, named Mount Wingen, 1820 feet in altitude. This is not a volcano, the burning being caused by the ignition of coal-beds—as is very generally supposed—at some depth from the surface. The Liverpool Range may be crossed

by numerous passes, of which the more noted are Pandora's Pass on the west, and the Gap at Murrumbundi on the east. The latter is 2314 feet above the sea. Many considerable rivers take their rise in the Liverpool Range, the lateral spurs from which, running north and south, form subsidiary watersheds. The principal of these branch ranges are the following :—

The Peel Range.—This range runs in a northerly direction, separating the basin of the Peel from that of its tributary, the Conadilly. The culminating point of the range is Mount Turi, 2952 feet.

The Mount Royal Range.—Commencing near the Hanging Rock, this range runs in a southerly direction. In the northern part it separates the streams flowing into the Manning from the tributaries of the Hunter; but further south, it projects into the valley of the latter river, sending off various spurs and ramifications, which form watersheds between the numerous affluents to the main stream. This range and its branches close in the eastern side of the Hunter River Valley. The highest peak is Cobrabald, or Mount Royal (? 3000 feet).

The Warrumbungle Range is a westerly prolongation of the Liverpool Range. It consists of a series of steep and lofty peaks, which, viewed at a distance, assume a variety of fantastic forms. The prevailing rocks are

trap and granite, and the soil around is generally of excellent quality. Numerous springs are found in this range. The culminating point is Mount Exmouth, 3000 feet.

16. THE BLUE MOUNTAIN RANGE.—The Blue Mountains are so named from the appearance they present when viewed from a distance. The portion of the Great Dividing Chain generally known by this name is very limited in extent, but in these pages, will include all the mountainous tract stretching from the Liverpool Range to Lake Burrah Burrah, south of the 34th parallel. Near the commencement the range is not high, being lower probably than any other part of the Dividing Chain. Its general direction is from north to south, but it is very irregular, and though 120 miles from the sea at starting, its average distance is not more than 70 miles, while at one point it approaches within 30 miles of the sea in a straight line. In the middle part of their course, the Blue Mountains consist of two ranges running nearly parallel, and separated by a deep narrow valley. The western range exceeds the eastern in altitude, and the mountains, though less steep on the whole, rise into distinct peaks and summits. Owing probably to the fact of these mountains being composed, on their eastern face at least of sandstone rock, they present more the appearance of a tableland, having few elevations rising much above the general level. Even these are, for the most part, rounded in form, instead of being notched or serrated,

or rising into pointed peaks, as occurs in mountains composed of older rocks. But the surface of the Blue Mountains is, so to speak, *scored* with vast chasms and deep ravines, with precipitous walls of rock on each side. "Narrow, gloomy, and profound, these stupendous rents in the bosom of the earth are enclosed between gigantic walls of sandstone rock, sometimes receding from, sometimes frightfully overhanging, the dark bed of the ravine and its black silent eddies, or its foaming torrents of water."* Some of these ravines open out into narrow valleys which contain good soil, and are watered by perennial streams, though generally inaccessible except at one entrance. Many of the precipitous sides of these ravines have a depth of 1500 feet. To the early settlers in the colony, the rugged nature of the Blue Mountains long interposed an impassable barrier between the coast and the interior. A passage was first discovered in 1813—twenty-five years after the original settlement of the colony. The average height of this portion of the Great Dividing Chain is about 3300 feet, though some of the peaks attain a somewhat higher elevation. The highest point is probably Beemarang, 4100 feet, at the head of Campbell's River, a little to the north of the 34th parallel.

The Hunter Range.—Commencing at Tayan Pic, on the 33rd parallel of south latitude, a spur branches off from the Blue Mountains towards the coast, and runs

*Strzelecki.

in a general easterly direction. It separates the tributaries of the Hawkesbury from those of the Hunter, enclosing the valley of the latter on the south, and spreading its numerous ramifications between the affluents of both rivers. The principal summit is Coricudgy. These mountains are more remarkable for their steepness and ruggedness, than for their height. Although precipitous and nearly inaccessible in some places, yet, as the most direct line of communication between Sydney, the Hunter Valley, and the Northern Districts, crosses this range, cattle are constantly driven by this route. But, on account of the difficulty of travelling by land, all other traffic between the Hunter and the metropolis is now carried on by sea. Formerly a good carriage-road existed, having been constructed at an enormous expense by the Government.

The Mittagong Range.—Further south and near the extremity of the Blue Mountains, another easterly spur, called the Mittagong Range, branches off, and forms the northern boundary of the Southern Table Land on the coast side of the Main Dividing Chain. The highest point is about 2454 feet above the sea. Near it are some remarkable isolated peaks, resembling volcanic cones, one of the more conspicuous of which, Jellore, is plainly visible from Sydney.

The Macquarie Range.—Besides the numerous other westerly spurs from the Blue Mountains, there is one of considerable importance which, as giving rise to

many tributaries of the Macquarie River, may with some propriety be designated the Macquarie Range. It commences at about the 34th parallel, runs in a north-west direction, and divides the waters of the Macquarie from those of the Lachlan. Many of the eminences attain a considerable height, such as Mount Lachlan (or Macquarie) ; but the culminating point is situated near the termination of the range. It is termed Mount Canoblas, 4610 feet.

17. THE CULLARIN RANGE.—This portion of the Great Dividing Chain extends from the Blue Mountains to the northern extremity of Lake George. Its direction is, for a short distance, westerly, but it afterwards turns abruptly to the south. The westerly portion of the range is of a smoother and more rounded character, less elevated and less intersected by ravines than the Blue Mountains. But at the angle where its course turn southward, the aspect of the country again changes, and the mountains become more rugged and precipitous. The average elevation is probably less than 3000 feet, though several important rivers have their sources in this range.

The Muntoonen Range.—This range, a spur from the Cullarin Range, divides the tributaries of the Murrumbidgee from those of the Lachlan in the uppermost part of their courses. The highest peak is Muntoonen, 3000 feet.

18. THE GOUROCK RANGE.—Extending from the head of Lake George to the sources of the most easterly tributaries of the Murrumbidgee is the Gourock Range, which runs in a southerly direction, increasing in height as it advances. Some of the summits attain considerable elevation, and the whole range presents a rugged and broken appearance. The principal elevation is Jindulian, 4300 feet.

19. MONARO RANGE.—From the termination of the Gourock Range, the main Dividing Chain continues for some distance in a southerly direction; but about $36^{\circ} 30'$ South Latitude, it makes an abrupt turn, first to the west, and then to the north-west. This portion of the chain may be designated the Monaro Range. It encloses the most extensive elevated tract of country in New South Wales, and forms the watershed between the streams flowing west and north to the Murrumbidgee, eastward to the coast, and southward to the Snowy River. The western portion of the Monaro Range consists of trap ridges, averaging 3000 feet in height, but frequently rising into peaks that attain an elevation of 4000 feet. It terminates a little north of the parallel of 36° in a remarkable mountain knot, from which several lateral, but lofty, ridges diverge in various directions. Among the more conspicuous summits of this range are—Malady's Peak, 3880 feet; Head of Kybean River, 4010 feet.

20. THE MUNIONG RANGE.—From the knot of mountains above mentioned, a main range continues in a S.S.W. direction to the southern boundary of the colony, from which point it turns more to the westward through Victoria. This range, called Muniong, constitutes the northern portion of the great Warragong chain (sometimes but improperly called, Australian Alps), and contains the highest land in New South Wales, though it does not include the culminating point of the system. According to Dr. Mueller, Mount Hotham, 7500 feet, in Victoria, is the highest peak in the Warragong mountains. In average height, the Muniong Range attains an altitude of at least 6000 feet, and some of its summits exceed 7000 feet, rising nearly to the level of perpetual snow which, in the same latitude and under similar physical conditions, is about 8000 feet above the sea. According to the character of the season, snow may be constantly seen on this range from May to October; and, though it is not ordinarily visible during the summer season, it occasionally falls in the months of December and January. As in other mountainous countries, tremendous storms not unfrequently occur, followed by floods caused by the heavy rains. In general, the Muniong Range consists of clusters of broken peaks, surmounting steep and wall-like ridges. "They present," says Rev. W. B. Clarke, "the outline of a true Sierra Nevada." In this respect, they differ widely from the Blue Mountains. The culminating point of the Muniong

Range is Mount Kosciusko, so named by the first explorer of this region, Strzelecki, in honor of his illustrious countryman, the Polish patriot. Mount Kosciusko is a craggy cone of syenite, rising to the height of 7300 feet, and commanding a prospect that includes an area of 7000 square miles. "Standing above the adjacent mountains which could either detract from its imposing aspect, or intercept the view, Mount Kosciusko is one of those few elevations, the ascent of which, far from disappointing, presents the traveller with all that can remunerate fatigue. In the north-eastward view, the eye is carried as far back as the Shoalhaven country, the ridges of all the spurs of Monaro and Twofold Bay, as well as those which, to the westward, inclose the tributaries of the Murrumbidgee, being conspicuously delineated. Beneath the feet, looking from the very verge of the cone downwards almost perpendicularly, the eye plunges into a fearful gorge, 3000 feet deep, in the bed of which the sources of the Murray gather their contents, and roll their united waters to the west." *

The Murrumbidgee Range.—This spur from the Muniong runs parallel with the uppermost course of the Murrumbidgee, and separates its basin from those of the Coodradigbee and other tributaries. The whole range consists of a succession of lofty broken peaks, some of which nearly rival the Muniong in elevation.

* Strzelecki.

Murragural (Mount Murray), the highest peak, rises to the elevation of 6987 feet.

The Tumut Range.—Another spur from the Muniong Range runs in a northerly direction, and divides the waters of the Tumut from those of the Coodradigbee River.

The Murray Range.—A third lateral range breaks off from the Muniong a little to the north of Mount Kosciusko and runs in a northwest direction, separating the tributaries of the Murray and Tumut, and extending its ramifications as far as the Murrumbidgee. The most noted summit is Mount Dargal, 5490 feet.

21. COAST RANGES.—On the east of the Great Dividing Chain, and parallel to it through a considerable portion of its course, lie ranges, which from their proximity to the sea, may be called Coast Ranges. In general, they form the *edge* of the Table Lands, and occasionally attain considerable elevation equalling, and sometimes surpassing, that of the Main Range. The distance of these ranges from the coast averages thirty-five miles, though they often approach much nearer. The following are the more conspicuous of the Coast Ranges :—

The Northern Coast Range.—In general terms, this may be said to lie between the Clarence and Manning Rivers, at a distance of 35 miles from the coast. It

attains an average elevation of about 3000 feet, but one peak, Mount Sea-View, at the intersection of the Coast Range with the Hastings Range rises to the height of 6000 feet, exceeding in this respect any mountain to the northward of the Blue Mountain Range.

The Illawarra Range.—Commencing at Bulli Point, on the coast, and running in a southerly direction, is the Illawarra Range. It does not attain any great elevation, but forms the edge of this part of the southern Table Land. Generally it lies within five miles of the coast, but on approaching the Shoalhaven River, it recedes farther to the westward, and is continued in another range further south.

The Currocbilly Range extends from the Shoalhaven River to about the 36th parallel. It therefore lies opposite to the Gourock Range, rivalling it in elevation and ruggedness. The most prominent elevation is Budawang, 3800 feet.

The South Coast Range runs southerly from the angle of the Monaro Range towards the boundary line of the colony, near which it suddenly turns in a north-westerly direction towards the Muniong Range, with the spurs of which it appears to interlace. The South Coast Range runs, therefore, nearly parallel with the Monaro Range, and these two, together with the Muniong Range, enclose the country drained by the Snowy River and its tributaries. This River finally escapes from

the enclosed basin through a gap in the range, after passing through much broken country. The highest peak in this range, in New South Wales, is Coolungubbera, 3712 feet; but the culminating point is Delegete Hill, in Victoria, 4000 feet.

22. INTERIOR RANGES.—Near the western boundary of the colony are several ranges of hills forming the western watershed of the Darling River. As yet comparatively little is known of these ranges, except that they rise out of a barren, rocky, and sandy country, and attain no very great elevation. The principal ranges in this locality are the Grey Range and the Stanley, or Barrier, Range. In the former, the most remarkable elevation is Mount Arrowsmith; in the latter Mount Lyell, about 2000 feet in height. Between the Darling and the Lachlan are numerous low ranges and scattered elevations, but they do not form any connected system, and their height is not sufficiently great to cause any important interruption to the general level of the great plains of the interior.

23. ISOLATED MOUNTAINS.—The most remarkable of these are contained in a series apparently dotted at intervals along the coast, and of which the following may be easily traced on the map:—

Mount Doubleduke,
Whoman,
Elanie,

Yarrahappini,
Kibbora,
The Three Brothers,
Mount Talawah,
Dromedary,
Mumbulla,
Imlay (or Baloon) 2900.

24. VALLEYS.—Beyond the ordinary river valleys, little reference is needed to this subject, except to mention the *sunk* valleys found in some parts of the colony. The name indicates the prominent feature in their physical conformation. They appear to have *sunk* below the level of the surrounding surface, and to be walled in on all sides by perpendicular rocky cliffs. Sunk valleys are most commonly to be met with in the Blue Mountains and their offsets. Such are the valley of Cox's River, Capertee, and others of less size in the Blue Mountains; Burrogorang, the valley through which the Wollondilly flows before its junction with the Nepean; the valley of the Kangaroo River; and Araluen. The bottom of the last mentioned is 2000 feet below the level of the surrounding country. Usually, sunk valleys have but one entrance, and are inaccessible to wheeled vehicles. A reference to the map will show that the valleys through which some of the eastern rivers flow are longitudinal, that is parallel to the direction of the Dividing Chain. This fact may be noted especially in the case of the Clarence River, in the upper part of its course,

and some of its affluents; the Hawkesbury; and the Shoalhaven. The parallelism between the Coast Ranges and the Dividing Chain accounts for the existence of these longitudinal valleys.

25. PLAINS.—The whole of the western portion of the colony, from the western edge of the table lands to the ranges beyond the Darling, is occupied by immense *plains*,—level tracts of country, little elevated above the sea. So perfect is the level of these plains that, in times of flood, rivers have been known to flow in the opposite direction to their ordinary current; and from the slightness of the slope, the rivers have a tendency to accumulate their surplus waters in marshes and lagoons. The River Macquarie, for example, in the lower part of its course spreads itself out into marshes of considerable extent, in which it was formerly supposed to terminate. Other rivers form *ana*-branches—as in the cases of the Murray and Upper Darling. In illustration of the slightness of the slope, it may be mentioned that at Wallambora, the River Peel is only 800 feet above the sea level; and, as the waters have to flow a distance of 1500 miles before they reach the ocean, it follows that the fall in this part of the country does not much exceed half a foot per mile. Hilly ridges are found at distant intervals, but they rarely attain a greater elevation than 500 feet above the level of the plain, and are furthermore of inconsiderable extent. The soil of these plains varies. The principal kind is a rich,

black tenacious mould, formed by the decomposition of trap; but tracts of light sandy soil—sometimes consisting of pure sand—are largely interspersed. When supplied with sufficient moisture, the black soil produces grass and herbage in the most exuberant luxuriance, though cultivation has not yet been found to prosper. Distinctive names have hitherto been applied to these plains to a limited extent only. Those most commonly known by name are the Liverpool Plains, lying between the Liverpool and Nundawar Ranges. Few large rivers flow through the great plains; but they are intersected by numerous small streams, which, in the hot season, are completely dried up, leaving no trace of moisture, but channels only to show where rivers had been. In some districts, the only reservoirs are shallow pools, which receive the rain as it falls, but from which the water is speedily evaporated by the burning heat of the sun. Hence it happens not unfrequently that the traveller may journey fifty, or even a hundred, miles without finding water. While this extreme dryness is the general characteristic of the great plains, it sometimes occurs that extensive districts are inundated in consequence of a rapid and heavy fall of rain, which causes the water to accumulate before it can be carried off by the ordinary channels, owing to the slightness of the slope. In their native state, the plains are generally clothed with luxuriant vegetation. The wild grasses and herbs sometimes grow to a greater height than that of a man.

26. THE COAST DISTRICT.—The various spurs running eastward from the Dividing Chain serve to diversify the surface of the Coast District, which is accordingly found to consist of alternate valleys and ranges throughout its whole extent. Its elevation above the sea level varies, though it is generally but slight. Popularly, various portions of the Coast District have received special names. Such are the Richmond, Clarence, Macleay, and Manning districts which are so designated from their proximity to these rivers respectively. Farther south, between 34° and 35°, is the beautiful Illawarra district, beyond which lie the Shoalhaven, Moruya, Bega, and Twofold Bay districts.

27. TABLE OF MOUNTAINS WITH THEIR ELEVATIONS AND PRINCIPAL PEAKS.

1. *New England Range.*—(3500—5000 feet.)

Ben Lomond.....	5000*	„
Rumbecc	4947*	„
Joconda	4927*	„
Boulgering Peak	4754*	„
Capoompeta	4730*	„
Chandler's Peak	4501*	„
Mount Duval	4174*	„
Blue Mountain.....	4126*	„
Apsley Range (summit) ...	3800*	„
Harnham Hill	3681*	„
Ohio Hill	3579*	„
Clarke's Lookout	3435*	„

2. *Macpherson's Range*.—(3000—5700 feet.)

Mount Lindsay	5700	„
Mount Barney	(?) 4—5000	„
Mount Gipps.....	(?) 4—5000	„
Mount Warning.....	3353	„

3. *The Hastings Range*.

Mount Sea View	6000	feet
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4. *Nundawar Range*.

Mount Lindsay	(?) 3000	feet.
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5. *Moonbi Range*.

The summit	3593	feet
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6. *Liverpool Range*.—(3500—4900 feet.)

Mooan, or Mount McArthur (?)	4200	feet.
Oxley's Peak	(?) 4000	„
Terell	(?) 4000	„
Towarra.....	(?) 4000	„
Tinagroo	(?) 4000	„
Mount Temi ..	(?) 4000	„
Murrulla	3710*	„
Hanging Rock.....	3413*	„
Summit between Barnard } River and Oaky Creek }	3872*	„

7. *The Peel Range*.—(2000 feet.)

Turi	2952*	feet
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NOTE.—Numbers marked * imply that the measurements were made by Rev. W. B. Clarke. The query denotes that the estimated height is not based on actual measurement.

8. *Mount Royal Range*.—(?) (3000 feet.)
 Cobrabald, or Mount Royal... (?) 3000 feet.
 Wollen (?) 3000 „
 Dyring (?) 3000 „
9. *Warrumbungle Range*.—(2500—3000 feet.)
 Mount Exmouth (?) 3000 feet.
10. *Blue Mountain Range*.—(3000—4000 feet.)
 Beemerang (?) 4100 feet.
 Honeysuckle Hill (?) 4000 „
 Mount Adine..... 3736 „
 Mount King George 3620 „
 Mount Clarence..... 3500 „
 Mount York 3440 „
 Mount Blaxland..... 3256 „
 Mount Tomah 3240 „
 Evans' Crown (?) 3200 „
 Tayan Pic (?) 4000 „
11. *The Hunter Range*. —(2500—3000 feet.)
 Coricudgy (?) 3000 feet.
 Nullo (?) 2500 „
 Monundilla..... (?) 2500 „
 Poppong..... (?) 2500 „
 Werong (?) 2500 „
 Warrawolong (?) 2500 „
12. *Mittagong Range*.(—2000 feet.)
 Highest point..... 2454 feet.

13. *Macquarie Range*.—(3000—4000 feet.)
 Mount Canobolas 4610 feet.
 Coombing(?) 3500 „
14. *Cullarin Range*.—(3000 feet.)
 Therolonong 3108 feet.
 Carrangal 3058 „
 Cullarin(?) 3000 „
 Mount Fitton(?) 3000 „
 Mount Chaton(?) 3000 „
 Mount Dixon(?) 3000 „
15. *Mundoonen Range*.
 Mundoonen.
16. *Gourock Range*.—(3000—4000 feet.)
 Jindulian 4300* feet.
 Uranbeen 3800* „
 Tumanwong
 Talerang.
17. *Monaro Range*.—(3500—4000 feet.)
 Head of Kybean River 4010* feet.
 Malady's Peak 3880* „
 Head of Winifred's Peak ... 3709* „
 Nimitabel Hill 3465* „
 Brothers
 Jennibruthera
 Cooma Hill
 Coolringdon
 Jejederick Hill
 Bobundara Hill.

18. *Munions Range*.—(5000—6000 feet.)
- | | |
|------------------------|-------------|
| Mount Kosciuszko | 7308* feet. |
| Ram's Head | 6838* „ |
| Jagungal..... | 6763* „ |
| Gungarlin | 5337* „ |
| Crackemback | 4697* „ |
19. *Murrumbidgee Range*.—(4000—6000 feet.)
- | | |
|-----------------|-------------|
| Murragural..... | 6987* feet. |
| Jallula..... | 6934* „ |
| Centry Box | |
| Mount Clear | |
| Mount Tennant. | |
20. *Tumut Range*.
- Talbingo
21. *Murray Range*.
- | | |
|---------------------|------------|
| Mount Dargal | 5490 feet. |
| Nackie Nackie | 2242 „ |
| Tumberumba. | |
22. *Budawang Range*.—(3000 feet.)
- | | |
|-----------------------|------------|
| Budawang | 3800 feet. |
| Currocilly | |
| Pigeon House (Diddel) | |
| Womballaway | |
| Talaterang. | |
23. *South Coast Range*.—(3000 feet.)
- | | |
|---------------------|-------------|
| Coolungubbera | 3712* feet. |
|---------------------|-------------|

24. *Barrier Range.*

Mount Arrowsmith 2000 feet.

Lyell.

CHAPTER III.

DRAINAGE.

28. SLOPES.—The drainage system of New South Wales is remarkably simple, there being but one principal watershed—the Great Dividing Chain ; and three principal slopes—the Eastern, the Southern, and the Western. Besides these, there is a small system of inland drainage, that, namely, of Lake George. The comparative sizes of the different slopes may be seen from the following estimate, in round numbers, of their respective areas :—

I. Western Slope.....	270,000	square miles
II. Eastern Slope	50,000	„
III. Southern Slope ...	3,000	„
IV. Inland Slope	300	„

It is evident, therefore, that not less than five-sixths of the whole surface of the colony is drained by the rivers on the western slope.

29. RIVERS ; SOURCES AND DIRECTIONS.—With few exceptions, the rivers have their sources in the Great Dividing Chain, from which they flow eastward or westward. This is their *general* direc-

on ; some peculiar modifications will be stated hereafter. Those tributaries of the Darling which join it on the right bank, rise in high land to the northward, and flow southerly. A minute examination of a good map of the colony will reveal some striking correspondences in the direction of the rivers. For example, on the eastern slope, the general direction of the principal rivers is first north or south, and then, making an abrupt bend, eastward. The large rivers to the north of the Hunter—the Clarence and Macleay—flow southward at first, but have some tributaries running to the north ; while those to the south of the Hunter—the Hawkesbury and Shoalhaven—flow northward. The rivers just enumerated are made to observe this direction by the fact that they flow through longitudinal valleys, parallel with the Great Dividing Chain. This coincidence in direction is still more remarkable on the western slope, where the rivers seem to describe parallel curves, flowing first northwest, west, and finally south.

30. FALL AND COURSES.—The average fall of the eastern slope is calculated at seventy feet per mile ; of the western, at three feet per mile for the whole course of the waters. The rivers draining the eastern slope are unconnected with each other, and consequently form many separate basins, some of them of small extent ; while, on the other hand, all the rivers on the western slope eventually unite their waters and form but one

immense basin, that of the River Murray. Again, the courses of the eastern rivers are comparatively short and their streams rapid, but the contrary is the case with the western rivers which are long and sluggish.

31. VOLUME.—The rivers of New South Wales are distinguished by the usual characteristics of streams flowing through countries situated near the Tropics, and have also some peculiarities of their own. In the first place, the volume of water they contain varies to a great extent with the seasons. During those portions of the year when little or no rain falls, the largest streams are greatly diminished in depth and volume, while the smaller ones cease to flow, and even become altogether dried up. It not unfrequently happens that water cannot be obtained from the bed of a river except in a few ponds or waterholes, at great distances from each other. This defect is aggravated by the excessive dryness of the climate which promotes rapid evaporation and exhausts the water contained in the channels of rivers, preventing, at the same time, the deposition of a fresh supply. On the eastern slope, the fall of the land is so rapid that the current of the rivers flows with great velocity, and the country is drained in a short space of time. On the other hand, the enormous length of the courses of the western rivers which have few tributaries except near their sources; the sluggishness of the streams, arising from the level nature of the country

through which they flow ; the facilities for evaporation thus afforded ; and the absorption by the soil which is generally of an arid and thirsty character, cause their waters to be easily exhausted. Except in the case of the rivers having their sources in the Muniong Range, all the streams depend for their supply of water entirely upon the rain-fall ; and, in consequence of the rocky and precipitous nature of the mountains, the rain is carried off almost as rapidly as it is deposited. As there is, therefore, little collection of water in internal reservoirs, whether rocky caverns or mossy swamps, there can be none of that gradual percolation of the moisture by means of which the rivers of other countries are supplied with a perennial stream.

32. VOLUME, COMPARATIVE.—From the circumstances just recited, arises this apparent anomaly in the condition of Australian rivers, that they decrease in size in proportion as they recede from their sources. From these causes, also, it happens that the Darling, with a course longer than that of the Danube and a basin probably of greater extent, has, in comparison with the same river, but an inconsiderable volume of water. In fact, the usual rule that the volume of a river depends upon the extent of its basin, appears to be flatly contradicted by the peculiar circumstances of Australia. The coast rivers indeed seem to be in accordance with rule ; but this apparent agreement is explained by the fact that they are in reality *inlets* of

the sea, their lower courses being influenced by the tide. The rivers flowing from the Muniong Range are materially increased in volume during the spring and summer by the melting of the snow, and are therefore more constantly supplied with water. Most of the rivers of the western slope in the higher part of their courses, on the Table Lands, consist of chains of deep pools in rocky or earthy basins, and connected watercourses. These pools seldom dry up, even at times of great drought when all appearance of water disappears from the watercourses; and it would therefore seem as if the waterholes, as they are called, were fed by springs, though this cannot be confidently asserted in many instances in New South Wales.

33. FLOODS.—At certain seasons, the rains are liable to fall in extreme abundance so as to fill the rivers overflowing and inundate the neighbouring country. These floods seem to occur to a greater extent than usual at certain irregular periods, and occasion serious injury to life and property. In former years, the Hawkesbury has been known to rise to an astonishing height above its ordinary level—according to some statements, as much as ninety feet. The destructive flood at Gundagai in 1852, when the Murrumbidgee rose in some places fifty feet above the usual height, is one of the most remarkable examples of inundation occurring on the west of the Dividing Chain. In the year 1860, the rivers on the coast from Twofold Bay

to the Manning River, and including the Shoalhaven, Hawkesbury, and Hunter, were several times in flood, owing to long-continued heavy rains. More recently still floods have occurred for several years in succession.

34. BARS.—Most of the rivers on the eastern slope form *bars* at their mouths. These sand-banks are caused partly by the mud deposited by the river itself, and partly by the sand washed up by the ocean. Their positions are frequently changed, according as the river current or the tide is the stronger. One effect of these bars is to impede navigation. The Richmond and Clarence Bars are especially noted.

35. DETAILED DESCRIPTION OF RIVERS.—The following descriptive notes will serve to convey some notions of the magnitude and relative importance of the various streams and of any peculiarities in their courses or basins.

EAST SLOPE.

1. The *Richmond* rises in the Macpherson Range, near Mount Lindsay, and flows for some distance in a southerly direction, receiving numerous tributaries, of which that called the North Arm is the most considerable. A little south of the 29th parallel, it turns to the north-east and forms a broad estuary, communicating with the Pacific at Lennox Head. The entrance is obstructed by a bar which, under certain conditions

of season and weather, is dangerous, excepting for vessels of small tonnage.

2. As regards length, volume, and extent of basin the *Clarence* is one of the finest rivers on the east coast. The sources of some of its numerous affluents lie as much as 150 miles apart in a straight line. The northern, or main stream, is composed of a number of rivers which rise in the Macpherson Range; and it receives in its course southwards, the Timbarra from the New England Range, near Capoompeta. In this part of its course, the Clarence fringes the Northern Table Land at the base of which it flows for some distance. The southern branch of the Clarence rises in the later range forming the watershed between the Clarence and the Macleay; and flows northward, receiving the Boy and the Mitchell from New England. From the confluence of the two branches, the united stream flows in an easterly direction, receiving in its course the waters of the Urara and other creeks. It becomes navigable at about 70 miles from the sea which it enters through a wide estuary called Shoal Bay. In the lower part of its course, the Clarence forms several broad lake-like expansions which, studded with islets, give a picturesque aspect to the scenery. The principal of these is named the Broadwater.

3. The *Macleay* is composed of two principal branches both rising in the Northern Table Land. One of these is the Gwyrá, which rises a little to the south of

andler's Peak and flows in a southerly direction to about the 31st parallel, where it joins the other branch, the Apsley. This river has its source in the southern portion of the New England Range, and flows in a general northern direction but by a very circuitous course, to the junction. The Apsley forms a cataract of great depth in one part of its course, and flows through a ravine between steep cliffs, said to be 3000 feet in elevation. After receiving other tributaries, the Macleay enters the sea at Trial Bay. Between the Clarence and the Macleay, there are several small rivers flowing into the Pacific—the Bellenger, Nambucra, &c. Little is known of the country through which they flow, except that it is low and swampy. Until within the last few years few persons besides cedar cutters had settled in the neighbourhood, but recently the lands have been occupied to a considerable extent.

4. Following the coast southward, we next arrive at the *Hastings* River, which rises near Mount Sea View, flows easterly, and, after receiving numerous small tributaries, flows into the Pacific at Port Macquarie.

5. The *Manning* has its source at the eastern extremity of the Liverpool Range, and is augmented by the numerous affluents which flow into it from the same range and from the Mount Royal Range. Its general course is easterly, and it forms a delta at its mouth. The two channels by which it communicates with the ocean are Farquhar and Harrington inlets, the

latter of which is completely blocked up with sand, while the passage of the former is impeded by a dangerous bar. The delta is divided into several islands—Mitchell, Oxley, Jones, and Dumaresque Islands.

6. The *Karuah* rises in the Mount Royal Range, and flows south and east into Port Stephens.

7. One of the most important rivers on the east coast is the *Hunter* (Coquon). The main source of this stream is in the angle formed by the Liverpool and Mount Royal Ranges, from both of which many tributaries descend. The valley of the Hunter being completely encircled with mountains, it receives tributaries from both banks throughout the whole of its course. The principal affluent is the Goulburn which receives seven large creeks from the Liverpool Range and five from the Blue Mountain Range and its eastern spurs. The united stream is augmented by the waters of the Paterson and the Williams on the left bank, and of the Wollombi and Wallis Creeks on the right. The general direction of the Hunter after its junction with the Goulburn, is easterly, and it flows into the Pacific at Newcastle. In the lower part of its course the Hunter expands to a considerable width, and is navigable for about 30 miles from its mouth.

8. The basin of the *Hawkesbury* (Deerubbun) is very curiously formed, and constitutes one of the geographical peculiarities of New South Wales. It

consists of three slopes inclining inwards—a northern, western, and an eastern slope—*e.g.* :

SLOPE.	WATERSHED.	GENERAL DIRECTION OF WATERS.
Northern...	Cullarin Range and eastern spurs ...	Northward.
Eastern ...	Blue Mountain Range	Eastward.
Western ...	Illawarra Range	Westward.

The main stream comes from the Northern Slope. It is formed, in the first instance, of the Wollondilly and its southern branch, the Mulwaree. In its progress northward the Wollondilly is joined by the Cooksundoon from the left, and by the Wingecarribee from the right bank. It then traverses the remarkable sunk valley called Burragorang, still keeping its northerly direction. The next important tributary, Cox's River, collects the waters drained from the southern portion of the Blue Mountains, flows in a general easterly direction, and joins the Wollondilly, the united stream then assuming the name of Warragamba. In the next place, several small streams rising on the west of the Illawarra Range, unite their waters and form the Cowpasture River, which flows westerly into the Warragamba. The peculiarity about these westward flowing waters is, that some of them rise within *two miles of the sea shore*, and flow in the opposite direction from it. The main stream is now called the Nepean, preserving that name until joined by the Grose from the Blue Mountains, when it is designated the Hawkesbury. After receiving the Colo and the Macdonald from the

Blue Mountains, the Hawkesbury turns suddenly to the eastward and discharges its waters into Broken Bay. Owing to the immense territory drained by the Hawkesbury, and the peculiarity of its watersheds, this river is more than ordinarily liable to sudden floods which cause its waters to overflow its banks and to rise to a great height above the usual level. The lower portion of the Hawkesbury is navigable, and the scenery on its banks is remarkable for its beauty and picturesque appearance.

9. The *Shoalhaven*, in its general course and direction, preserves a curious parallelism with the main stream of the Hawkesbury, first running northward for a considerable distance, and then suddenly turning to the eastward. This river rises near the southern extremity of the Gourock Range, and flows northward through that portion of the southern Table Land which lies between the range just mentioned and the Budawang Range. Numerous small tributaries join the Shoalhaven in this part of its course. After making the great bend to the eastward, it descends from the table land and flows through immense ravines ranging from 500 to 1500 feet in depth. These are known as the "Shoalhaven Gullies."

10. The *Clyde* (or Bundo) rises in the Budawang Range and flows southward, parallel with the coast, into Bateman's Bay. It is short, but its lower course is navigable for vessels of considerable tonnage.

11. The *Moruya* rises on the Table Land (S.), and flows easterly into the Pacific after a short course of about eighty miles. One of its small feeders drains the remarkable Araluen Valley.

12. The *Tuross* rises in the Monaro Range, and flows in an easterly direction into the Pacific.

13. The numerous feeders of the Bega River take their rise in the Monaro and South Coast Ranges, and, after uniting into one stream, flow into the Pacific.

14. The *Towamba* rises in the South Coast Range, and flows into Twofold Bay.

SOUTHERN SLOPE.

15. Only one river drains this slope, the *Snowy River* (or Margalong.) Its branches rise in the Muniong, Monaro, and South Coast Ranges. They are—

FROM MUNIONG RANGE.	FROM MONARO RANGE.	FROM SOUTH COAST RANGE.
Eucumbene	Wulwye	Bombala and
Crackenback	Bobundara	tributaries
Moamba	Mac Laughlan.	Cambolong
Tongaro		Columboca
Moyengul		Maharatta
Ingeegoodbee.		

The main stream rises in the Muniong Range. Owing to the broken nature of the country through which it flows, the course of the Snowy River is exceedingly

irregular. Its direction varies from North, to East, South, and West, and the slopes of its basin vary in the same manner.

WESTERN SLOPE.

16. Commencing at the north, the first of the great rivers on the western slope is the *Darling* (Callewatta), which drains more than half the colony. Omitting all mention of those among its feeders that belong more to Queensland than to New South Wales, the first large tributary is the *Barwan*. This river, with its affluents, drains the western slope of the Northern Table Land, together with a large portion of the great Plains. It drains, in particular, the magnificent tract known as the Liverpool Plains. The principal branches are—the M'Intyre or Karaula, the Gwydir, and the Namoi or Peel. Each of these requires a separate notice.

17. The *M'Intyre* has all its sources in the New England Range, from which it receives the Severn and Dumaresque Rivers, together with some smaller streams. Its course is circuitous, and as it reaches the flat country, it sends out ana-branches, as at Calandoon.

18. The *Gwydir* (or Kindur) runs nearly parallel with the M'Intyre. Its sources are in the New England and Nundewar Ranges. It joins the Karaula in 29° 30' S. Latitude.

19. The *Peel* (or *Namoi*) drains a northern, a western, and a southern slope. Its general course is north-west, and it flows through a comparatively well-watered country, receiving a large number of tributaries. It is composed of two principal streams—the *Maluerindi*, which receives the *Manilla* and some smaller affluents; and the *Peel* proper, which is fed by the *Cockburn* and a large number of creeks rising in the *Liverpool Range*. After the junction of these two streams, the *Namoi* receives, on the south bank, the *Conadilly*, *Terebeile*, and other rivers, all having their numerous sources in the *Liverpool Range*.

20. The *Barwan* next receives on its left bank, the *Castlereagh* from the *Warrumbungle Range*, and the *Merri Merri* Creek running nearly parallel.

21. The *Macquarie* (*Wambool*) is formed by the union of the *Fish* and *Campbell's Rivers*, the head waters of which rise on the west slope of the *Blue Mountain Range*. Its course, at first irregular, becomes more direct as it emerges from the *Table Land* and mountainous country out into the level open plains, and during one half its length is about north-west. From the right bank it receives the *Winburndale Creek*, the *Turon River*, the *Cudgegong*, the *Talbragar*, and the *Coalbaggie Creek*; from the left it receives the *Bell River* and various smaller streams. In the lower part of its course, the *Macquarie* expands and spreads its waters over a large tract of low-lying plain, forming, according to the char-

acter of the season, a vast swamp or an inland lake in which the river was formerly believed to terminate. The Macquarie, however, issues from the swamp, and resumes its course to the Barwan which it joins a little to the south of the 30th parallel.

22. Meanwhile, on the right bank, the Balonne or Narran, the Bokharra and the Culgoa join the Barwan, and the united stream, henceforward known as the *Darling* flows in a south-westerly direction into the Murray, which it enters by two mouths.

23. The *Bogan* is next received from the left bank, and although the confluence of these two streams is fully 500 miles from the sea, this is the last considerable tributary, with the exception of the *Warrego* which joins the Darling on the right bank to the southward of the 28th parallel. The *Paroo* unites with the Darling still further to the south.

24. The *Lachlan* (Calare) is the next main stream, though greatly inferior in length and extent of basin to the Darling. It rises on the western flanks of the Cullarin Range and for some distance flows in a northerly direction. After uniting with the Jerrawa Creek, it assumes the name of Narrawa, and receives the Crookwell and some minor tributaries from the right. It is then joined by the Abercrombie also from the right bank, and is then distinctively known as the Lachlan. The Boorawa from the left, and the Belubula from the

right, are the last considerable affluents, although numerous creeks and rivulets, in addition to those mentioned, contribute to swell the waters of the Lachlan. Sweeping round to the west and north-west like an arc of a circle, the Lachlan finally makes its way into the Murrumbidgee, flowing in the lower part of its course through vast level plains.

25. The upper course of the *Murrumbidgee* is singularly tortuous. Like the Snowy River, it receives tributaries from all directions, and some of these which rise within a few miles of its own source, do not mingle their waters till 200 or 300 miles of its course have run. The remotest sources of the Murrumbidgee lie among the Muniong, Monaro, and Murrumbidgee Ranges, and at first its direction is south-east; but in the neighbourhood of Cooma it turns abruptly to the northward, and maintains that direction for some distance, first receiving the waters of the Umaralla and its feeders from the right bank. The Queanbeyan from the Gourock Range, and the Yass River from the Cullarin Range next contribute their waters in succession; and after them, two others from the left bank, the Coodradigbee and the Tumut, besides smaller streams, such as the Adelong, the Nackie, and the Tarcutta. After the first 300 miles it pursues a westerly course, and uniting with the Lachlan, the joint streams flow into the Murray.

26. The *Murray* (Millewa) rises in the Muniong Range near Mount Kosciusko, and flows westerly and

north-westerly through the whole width of the colony, receiving in its course the drainage of nearly half of Eastern Australia. The Murray is, therefore, the most important stream in this portion of Australia, if not indeed the largest yet known in the whole continent.

26. The lower courses of the *Murray* and *Murrumbidgee* are connected by ana-branches with each other. For example, the Wakool (Edward) River runs out of the Murray and flows in nearly the same direction. After receiving and throwing off numerous ana-branches, it is joined by the River Coates, itself consisting mainly of the Yanko Creek, an ana-branch from the Murrumbidgee and the Billabong Creek. Much of this part of the colony is consequently covered with a network of streams.

INLAND SLOPE.

This consists of a small tract of country lying around Lake George and drained by two small creeks Turallo and Butmaroo.

36. LAKES.— The Lakes of New South Wales are few in number compared with the vast extent of its territory, and are also of small sizes. On account of the general dryness of the climate, and the infrequency of the fall of rain in most parts of the country, the lakes are sometimes reduced to the condition of mere swamps, and it has even happened that the bed of a lake has been brought under cultivation. The

numerous small lakes which abound in some parts of the country are locally termed "Lagoons."

37. FIRST LAKE REGION.—Lakes are found in two districts of the colony, and they differ in character accordingly. The first of these districts is situated on the Southern Table Land, on the western side of the Dividing Chain chiefly. In this district are Lake George, Lake Bathurst, and the Tarrago Lakes. The first of these is in general about fifteen miles in length by five in breadth, with an area of about forty square miles, though its dimensions vary considerably with the nature of the seasons. Although situated at an elevation of 2000 feet above the level of the sea, this lake receives the drainage of a considerable extent of country on its eastern and southern banks. The western shore is hemmed in by a steep range of hills of no great elevation. Lake Bathurst, in the same latitude (35° S.), but further to the eastward, is much smaller than Lake George, being about three miles in diameter, and having an area of eight square miles. It is supplied with water from numerous small streams which flow only in rainy weather. The Tarrago Lake lies to the north of Lake George, and is of very small extent. Still farther north, and near the crest of the Dividing Chain, is the Burra Burra Lake, at an elevation of about 3000 feet above the sea.

38. SECOND LAKE REGION.—The second lake region lies along the lower courses of the great western

rivers. For the reasons already stated, it is extremely difficult to determine the size of these lakes, inasmuch as they depend for their supply of water either upon the amount of rainfall, or upon the overflowing of the rivers. Near the Lachlan Rivers, and on the eastern side, are Lakes Cowal, Cudjallagong or Regent Lake, and Quawingame; on the right bank, Lakes Waljeers and Boyango. On the right bank of the Murrumbidgee lies Lake Paika. Between the Murray and Murrumbidgee are Lakes Urana, Tala, and Yonga. Near the Murray, on the right bank, are Lakes Proa, Benanee, and Victoria, the last near the western boundary of the colony. Lake Cawndilla is situated on the right bank of the Darling, and Lakes Gunyulka and Poopelloe on the left bank.

39.—TABLE OF RIVERS.—Table showing the lengths of rivers and the areas of their basins :—*

I.—EAST SLOPE.

RIVERS	LENGTHS (windings included).	AREA OF BASINS.
Richmond.....	120 miles.	2,400 square miles.
Clarence	240	8,000
Macleay	190	4,800
Hastings	70	1,400
Manning	100	3,000
Karuah.....	45	600
Hunter	300	7,900

* These figures are mere estimates. Until actual surveys of the country have been made, they may be used as approximations to the truth.

RIVERS	LENGTHS (windings included).	AREA OF BASINS.
Hawkesbury...	330 miles.	8,700 square miles.
Shoalhaven ...	260	3,300
Clyde	70	450
Moruya.....	80	350
Tuross	60	600
Bega	60	550
Towamba	40	300
Other small rivers		7,650
		Total... 50,000

II.—SOUTHERN SLOPE.

Snowy River	240 miles in New South Wales	} 3,000
Eucumbene		
Mowamba	Tributaries of the Snowy River	
Bobundarra		
Bombala		

III.—INLAND SLOPE.

Turallo Creek	}	300
Butmaroo Creek		

IV.—WESTERN SLOPE.

Mooni	25 miles.*	230 square miles*
Narran	125	5,500
Warrego	125	3,700
Paroo	200	5,600

* In New South Wales only.

RIVERS.	LENGTHS.	AREA OF BASINS.
M'Intyre.....	350 miles.	5,250 square mile
Gwydir.....	445	9,500
Namoi.....	600	17,500
Castlereagh...	365	5,200
Macquarie ...	750	18,000
Bogan.....	450	8,300
Barwan	510	4,150
Darling (proper)...	650	100,000
TOTAL FOR DARLING		
AND AFFLUENTS		198,000
Lachlan	700	27,000
Yass	70	675
Queanbeyan		700
Umeralla		750
Coodradigbee.....		550
Tumut		1,600
Murrumbidgee ...	1,350	25,725
TOTAL FOR MURRUMBIDGEE		
AND AFFLUENTS		57,000
Murray	1,120	15,500
TOTAL FOR MURRAY		
AND AFFLUENTS ...		270,000.

CHAPTER IV.

CLIMATE.

40. GENERAL CHARACTERISTICS OF CLIMATE.—Lying between the 28th and 39th parallels of south latitude, New South Wales occupies the warmer portion of the South Temperate Zone. The character of the climate may be partly inferred from the fact that the country is included in the space bounded by the isothermal lines of 70° and 60° , and is similarly situated to the southern portions of Spain and Portugal, north of Africa, and the Southern States of North America. In general terms, the climate may be described as warm and dry. Great variations of temperature are occasionally experienced for short periods; but, on the average of years, the difference between the mean temperatures of summer and winter is not more than twenty degrees. In like manner the generally dry condition of the atmosphere is in some years increased, and severe droughts ensue; while, on the other hand, excessive rains and consequent floods prevail at uncertain intervals.

41. VARIETIES OF CLIMATE.—But, in a country of such vast extent as New South Wales, it is to be expected that diversities of climate will exist; and

accordingly we find that such differences are actually observed, and are produced not only by variation of latitude, but also by inequality of elevation above the sea level. Some others of the causes which influence climate operate with more or less force in different portions of the country, as, for instance, proximity to the sea, position and direction of the mountain chains, and the prevailing winds. While, therefore, the *general* character of the climate remains as above described, it may be classed under three varieties, corresponding to the physical divisions previously pointed out. The precise nature of the differences between these districts, as regards climate, may be seen from the following Table :—

	MEAN ANNUAL TEMPERATURE.	MEAN ANNUAL FALL OF RAIN.	AVERAGE NUMBER OF WET DAYS.
Coast District	64°	... 50 inches ...	140
Table Lands	55°	... 30 inches ...	114
Interior Plains	65°	... 19 inches ...	64

It must of course, be understood that the figures given above are mere approximations, sufficient observations not having been taken to ensure strict accuracy.

42. CLIMATE OF THE COAST REGION.—The Coast Region extends over nine degrees of latitude. This circumstance alone is sufficient to account for differences in the temperature of various parts ; but the *general* character of the climate throughout the district is nevertheless the same. As stated in the foregoing

table, the mean annual temperature is 64° ; the mean maximum of the hottest months, 87° ; the mean minimum of the coldest months, 45° ; and the difference of these means, 42° . The mean annual temperature is higher and the fall of rain greater than in the next division, but it is not subject to the extremes of heat and cold which are sometimes felt on the plains. It is warmer than the Table Lands on account of its lower elevation, and the existence of a warm ocean current running along the Coast from north to south; and the moderating influence of the sea preserves it from the great heats of the interior. The proximity of the Dividing Chain to the sea causes a greater amount of rain to fall on the Coast Region; for the clouds brought up by the south-east wind are arrested in their progress westward by that range, and are made to deposit their moisture on its eastern flanks. The winter winds blow generally from the westward and are cold and dry. The rains however usually accompany south-east winds. In summer, the prevailing wind is the north-east—a sea-breeze blowing with considerable regularity, though not so certain as within the tropics. It is varied chiefly by the *hot wind* blowing from the north-west, and by a cold wind from the south. The hot winds blow occasionally during the summer, and raise the temperature in exposed situations as high as 120° . They are also excessively dry, and their combined heat and dryness not only render them intolerably oppressive to the human constitution, but cause them to affect vegetation

injuriously by scorching and shrivelling leaves and withering flowers and fruits. The cause of the hot wind is not known. Formerly it was believed to be produced by the heating of the atmosphere in the neighbourhood of the great desert which was supposed to occupy the interior of the continent ; but it is now more generally regarded as forming one of a series of similar currents prevailing in Southern Europe, Northern Africa, Arabia, Siberia, North and South America. The hot wind is usually succeeded by a breeze from the southward, which, from its lower temperature, imparts a grateful coolness to the atmosphere, and invigorates the frame rendered languid by the excessive heat. Notwithstanding this drawback, the climate of the coast region is, generally speaking, genial, healthy, and pleasant. The vegetable products are of a strangely varied character. The banana and the oak, the apple and the fig, the vine and the peach flourish side by side.

43. CLIMATE OF THE TABLE LANDS.—The climate of the Table Lands, by reason of their greater elevation, is considerably colder than that of the other sections of the colony. The mean annual temperature is 55° ; the mean summer maximum 83° ; the mean winter minimum, 27° ; and the range of the thermometer between these points, 56° . As regards humidity, it holds a position between the coast and the plains, being dryer than one and moister than the other. Some portion of these differences is doubtless occasioned by the

presence of the great mountain chain which, though never rising to the level of perpetual congelation, is in parts sometimes covered with snow for tolerably long periods. In winter, the temperature frequently falls below the freezing point, and ice is then very common; but the frost is generally of short duration, as the power of the mid-day sun is sufficient to produce a thaw. Altogether the climate closely resembles that of the South of England, though, from the fact that the rain falls more rapidly and less constantly, the excessive humidity of the English climate is not experienced. The fruits, grain, and vegetables of the British Islands may be cultivated to great perfection on the Table Lands, the Coast Region being too hot for some of them, as the gooseberry and currant. On the other hand, the semi-tropical productions of the coast, such as the banana, do not flourish on the Table Lands, on account of the lower temperature.

44. CLIMATE OF THE INTERIOR PLAINS.—On the Plains, heat, cold, and dryness are more intense than in the other portions of the colony. The mean annual temperature is 65° ; the mean maximum of the summer months, 101° ; the mean minimum of the winter months 35° ; and the range of the thermometer between these two points is 66° . The climate is hotter, because the cooling influences of proximity to the sea and of elevation are wanting; it is colder, because of the more rapid radiation of heat and exposure to cold winds; and dryer, because of the absence of mountain chains

to attract clouds, arrest their progress, and bring about the precipitation of their moisture. During summer in the shade the temperature has been known to rise to the height of 140° Fahrenheit; while in winter nights the thermometer has fallen almost to zero. Again, while the general character of the climate is that of extreme dryness, it has been varied, on the one hand, by occasional years of drought during which no rain fell; and on the other, by years of excessive rain. In the one case, the vast level plains were converted into waterless deserts in which the *mirage* was of not infrequent occurrence; and in the other, they were changed into immense lakes and apparently interminable swamps. Hence it has happened that, in the spot where one explorer has described a large and beautiful lake, another, in succeeding years, has found wide meadows, well grassed but deficient in water. A remarkable example of this fact is afforded by the reports of the explorers, Oxley and Sturt. The former found the lower courses of the Macquarie and Lachlan to expand into vast marshes which effectually checked his advance, and led him to believe that a large inland sea existed in this part of Australia. When after an interval of ten years, three of which had been extremely dry, Sturt visited the region of the Macquarie, he found no water, but a dry arid tract resembling a desert.

45. GENERAL REMARKS.—Some of the general characteristics of the climate are the lightness and purity of the atmosphere, the bright clear appearance

of the sky, and the prevalence of sunshine. These, together with the dryness of the air, tend to counteract the enervating and debilitating effects of great heat, and thus render the climate more endurable than that of countries in which a high temperature is accompanied with excessive moisture. The cheerful, exhilarating quality of the climate strikes the stranger from any of the dull and murky countries of the north, as one of the most marked features. Notwithstanding the number of wet days—that is, days on which *some* rain falls—the certainty of fine weather can, in most years, be depended upon for long periods. The rain however is almost tropical in its character, falling rapidly and in large quantities especially during the frequent thunder storms which occur in the warm season. It is on record that in 1841 the enormous quantity of twenty inches of rain fell on one day at Sydney.

CHAPTER V.

GEOLOGICAL STRUCTURE.—SOIL.—MINERAL PRODUCTIONS.

46. In so extensive a country as New South Wales, it is natural to suppose that the varieties of geological formation will be numerous and strongly contrasted; and as a consequence of this diversity, it will be admitted that a detailed description would not be possible except by expatiating upon the subject at great length. The following account is therefore very general in its nature.

47. GENERAL GEOLOGICAL STRUCTURE.—The Table Lands and principal mountain ranges consist for the most part of plutonic rocks,—granite and its varieties. These form as it were the *floor* of the Table Lands, and are in many places pierced and rent by the intrusion of igneous rocks of trappean formation, or covered with either metamorphic or primary strata. Occasionally the granitic rocks rise into lofty peaks, as in the case of Mount Kosciusko which consists of a sienitic cone resting upon a granite base; but as a general rule, they form only a gently undulating surface, or swell into ridges of a rounded contour and moderate elevation. The trap rocks which penetrate the granite

or sometimes spread out into tracts of level country, forming the *plains*, as they are popularly termed, on the Table Lands; but as frequently rise into sharp peaked peaks. An example of the latter may be seen in the Liverpool Range. Rocks of the primary series chiefly prevail in the Coast District, but they are occasionally disturbed and penetrated by some of the eruptive rocks. That narrow strip of territory bordering upon the coast and named the Illawarra District, exemplifies this statement in a remarkable manner. In this district it would appear as if the original coast had been upheaved to the height of 1500 feet by the eruption of igneous rock, and that the edge of the mountains was formed by the precipitous cliffs of the former shore. The trap so produced constitutes the greater portion of the surface of the district. Among the primary rocks under consideration, none are perhaps of greater importance than those of the carboniferous group which occupy a large proportion of the Coast District. The "Coal Measures," as they are called, extend over the valley of the Hunter and occupy the whole of the country to the south as far as the Shoalhaven River and west to the watershed of the Blue Mountain Range, but omitting the district around Sydney. Northward the Coal Measures reappear in the Richmond and Clarence River Valleys. To the westward of the Northern Table Land, a considerable tract lying between the 150th and 151st Meridians is of the same formation which occurs again around the head waters of the Castlereagh, the Talbragar, and the

adjacent portions of the Macquarie basin. The Great Plains of the western interior are composed of tertiary rocks and recent deposits, alternating with extensive areas formed of decomposed trap. While no traces of recent volcanic action are observable in any part of the colony, it will be seen from the fore-going statements that this agency has been mainly instrumental in giving to the country its present structure and appearance.

48. SOIL.—In general terms, the character of the soil varies with the nature of the underlying strata. When the soil is formed by the disintegration of primary rocks, it is, with the exception noted hereafter, of a poor and unfruitful quality, being deficient in those organic and alkaline ingredients which produce fertility. The conditions necessary for the productions of vegetable mould are nearly all absent in New South Wales. The trees are almost universally evergreen, and there is consequently no deposit of leaves in autumn. The leaves are destitute, for the most part, of salts; and when they fall, their decomposition into mould is prevented by the heat and dryness of the climate. There is in New South Wales a large quantity of land of moderate fertility, suitable for grazing purposes, together with a considerable proportion of the worst description (cold clay or loose sand), useless for either grazing or agricultural purposes. But in cases where the soil is produced from the decomposition of trap or limestone rock, it is of high quality,

requiring only abundant moisture to render it extremely productive. For example, the Illawarra District has soil composed, to a great extent, of trap, and it exhibits a high degree of fertility, as is manifest from the luxuriance of its indigenous vegetation. The low grounds lying along the banks of the rivers, especially those flowing into the Pacific, are formed of rich alluvium, in some cases wonderfully fertile. The bottom lands of the Clarence, Macleay, Manning, Hunter, Hawkesbury, and Shoalhaven are especially noted for their productiveness, and probably vie in quality with the richest lands in the world.

49. MINERALS.—Comparatively little is known of the mineral treasures of New South Wales, and much has not been accomplished in the way of their development. The list of minerals known to exist in the country comprises some of the most important, both as regards utility and commercial value. Freestone for building is plentiful in the Coast District, and is found of excellent quality at Sydney. On the Table Lands and Cordillera, granite and its varieties may be obtained in abundance; it also is used for building purposes. Limestone is very generally distributed, but not in large quantities, throughout the Coast District and the Table Land. The upper portions of the valleys of the Hunter, Shoalhaven, Wollondilly, Abercrombie, and Murrumbidgee; the valley of the Macquarie in the Wellington district, and some of its affluents as the Cudgegong and Fish Rivers; and Monaro and Yass

Plains are the principal localities in which deposits of limestone are found. In some instances, as in the basins of the Shoalhaven and Wollondilly, the limestone passes into marble of fine quality and varying in color from pure white to jet black. Slate is abundant on the Table Lands, and the kind used in roofing houses is occasionally met with. Deposits of porcelain clay resulting from the decomposition of granite, are found upon the Table Lands, and brick clay is abundant in most parts of the colony. Meerschaum has been found in the Northern Table Land, in the neighbourhood of Tenterfield; and Plumbago, at Dundee, and on the banks of the Northern Rocky River, a tributary of the Clarence. At present, Salt is only known to exist on the banks of the Talbragar.

50. COAL.—As already mentioned that most valuable of minerals, coal, is found in great abundance in many parts of the colony. Coal mining is carried on to the largest extent on the lower Hunter and in the Illawarra District. But beds of coal have also been observed in the Vale of Clwyd in the Blue Mountains; on the Western side of the Talbragar River; the valley of the Peel River; the Gwydir district; and the Clarence and Richmond Valleys. Deposits of Kerosene Shale are found in connection with the coal beds in Illawarra and the Vale of Clwyd.

51. METALS.—GOLD.—Among the metals found in New South Wales, Gold occupies the first rank, both

on account of its value and the attention paid to the search for it as a branch of productive industry. As a general rule, the deposits of gold are confined to the Cordillera and the Table Lands. But it is also found on the western verge of the Southern Table Land on the banks of the Lachlan, and farther south at Burrangong. It is usual to arrange the various gold-fields into Northern, Western, and Southern. The Northern Gold Fields include the following localities :—Timbarra, on branches of the Clarence River ; the Rocky River ; the Peel River and its first tributaries ; and Bingera, on an affluent of the Gwydir. The Western Gold Fields occupy numerous localities in the basins of the Macquarie and Lachlan, the head waters and tributaries of which are all more or less auriferous. Among the more productive may be specified—the Turon, the Meroo, the Cudgegong, and the Abercrombie ; but some of the minor streams are also very rich. The gold-fields situated in the vicinity of Braidwood ; Kiandra, at the head of the Snowy River ; Adelong, on some of the tributaries of the Murrumbidgee in its middle course ; and Burrangong, on creeks which ultimately, perhaps, find their way into the Lachlan ; are reckoned among the Southern Gold-fields. In this list, only the most important localities are mentioned ; but there are numerous other places in which gold is found and worked.

52. SILVER.—Silver is known to exist in New South Wales and has principally been found in combina-

tion with lead. The best known localities from which silver may be obtained are in the neighbourhood of Bathurst, Bombala, Talwal Creek, Murrurundi and Moruya ; but it is also found in the northern portion of the N. Table Land, near Tenterfield.

53. IRON.—Iron is very generally distributed over the surface of the colony. Several of the more valuable ores exist in great abundance, and give promise of being a source of future wealth. In general, iron is found in all the gold regions, and its existence has been discovered in the Clarence River district, in the upper Shoalhaven Valley, on the Talbragar, in the vicinity of Jamberoo, Marulan, and Binalong, and in the Mittagong Range. The ore has hitherto been worked in the last mentioned locality only, where it is of extraordinary richness.

54. LEAD.—The indications of the existence of lead are numerous. It has been met with in considerable abundance, though little has yet been accomplished in the way of productive mining, in the following localities:—The Upper Hunter Valley ; the Crookwell and some neighbouring streams ; the Queanbeyan ; the vicinity of Yass ; Gourock Range ; Moruya ; the lower Shoalhaven Valley ; and the Monaro District, especially in the basin of the Snowy River.

55.—COPPER.—In addition to gold and iron, copper may be regarded as one of the characteristic metals of New South Wales. The metalliferous region lying

between and around the 149th and 150th meridians abounds in copper ores of fine quality and varying degrees of richness. In some instances, large quantities of the pure metal have been discovered. Different ores of copper have been discovered at the Richmond River, Upper Hunter, Molong, the vicinity of Orange, the Belubula, Campbell's River, the Abercrombie and neighbouring streams, the Wollondilly, Gourock Range, the Tumut, and Monaro District. The copper lodes have been worked at Coombing, Summerhill, Cornish Settlement, Cadiangullong, the Canobolas, and Currawang near Lake George.

56. OTHER METALS.—*Tin* is known to exist in small quantities in all the gold-fields of the colony, but it has not yet been made a special object of search. On the Shoalhaven in the vicinity of Bungonia, on Copabella Creek between Albury and Tumbarumba, and on the west of the New England Range, considerable deposits have been discovered. *Antimony* has also been found in various parts of the colony, especially at the head waters of the Clarence and on the Paterson. Deposits of *Cinnabar* have been found and worked to some extent on the banks of the Cudgegong, near its source. Traces have also been seen at Trunkey Creek, and it is probable that further deposits may yet be discovered on some other of the gold fields. *Manganese* is known to exist near the Bell River, a tributary of the Macquarie, and on the Upper Clarence. Minute quantities of rarer metals and

minerals are also found,—such as *platinum*, *iridium*, *nickel*, and *titanium*.

57. PRECIOUS STONES.—*Rubies*, *sapphires*, and *gar-
nets*, have been obtained from the detritus found in the
beds of rivers, chiefly in the gold producing regions.
Diamonds in considerable numbers have also been
procured on the banks of the Cudgegong; and have
also been found on the Meroo, and near Dubbo.

CHAPTER VI.

VEGETABLE PRODUCTIONS.

58. GENERAL CHARACTERISTICS.—The vegetable productions of New South Wales, as of Australia in general, differ to a remarkable extent from those of the rest of the world, in appearance and structure. With scarcely an exception the trees are evergreens, and owing to the sombre hue of the leaves, they give a dark and monotonous appearance to the landscape. “The course of the seasons even, which in extra-tropical countries causes the leaves to fall and diversifies the foliage with the bright fresh verdure of spring or the gorgeous and variegated tints of autumn, has no influence upon the unvaried mantle of olive-green which clothes the forests of Australia.”* The leaves of a large proportion of the trees are distinguished by the further peculiarity of being fixed vertically, instead of horizontally, so that they cast but little shade when compared with the forest-trees of other parts of the world. In many cases, also, both sides of the leaf are alike and possess the same organs. The following observations refer to the more remarkable of the vegetable productions of the colony.

* Strzelecki.

59. THE ACACIA FAMILY.—The family of the *Acaciæ* furnishes the greatest number of plants, upwards of a hundred species being known to exist in Australia. During the flowering season, the districts in which they flourish are profusely decorated with their gay yellow blossoms, and the woods are redolent with their powerful odour. Some of them having been used by the early settlers for the purpose of wattling the partitions of houses, they are commonly known by the name of “Wattles.” In general they do not attain any great size, and the timber is of little value. The bark of one of the most common, the “Green Wattle,” is used for tanning, for which it is well adapted. Another of this family, the Myall, is an elegant tree, remarkable for the beauty of its wood which has a delicious scent resembling that of violets. It is only found on the great plains of the interior.

60. THE EUCALYPTI.—Next in point of numbers, but superior in commercial importance, are the various species of *Eucalyptus*, or Gum Trees, which may be found in all parts of the colony, from the snow-clad heights of the Muniong to the semi-tropical heats of the Clarence district. Some species shed their bark periodically, and all exude a hard astringent gum, from which circumstance they derive their common name. After rain, or when crushed, the leaves of all the species give out a powerful odour resembling camphor. Among the more remarkable members of

this family are the *Ironbarks*, noted for the hardness, strength, and durability of their wood; the *Stringy-bark*, from which the bark may be stripped in large sheets; the *Mahogany*, equal in durability to Ironbark; the *Blue, Red, White, and Spotted Gums*; and the *Manna* which yields a peculiar substance slightly resembling manna. Other useful trees are the so-called *Tea-trees*, the *Turpentine-tree*, and others belonging to the same natural order as the *Eucalyptus*.

61. CASUARINÆ, PINES, AND BANKSIAS.—Some species of *Casuarina* are found in the colony, being popularly known as “Oaks,” to the timber of which tree their wood bears a slight resemblance, though their general appearance would rather entitle them to be called “firs.” The timber is very useful. The tree designated the “Silky Oak” belongs to another family (*Grevillea*) and supplies valuable timber. Of the trees commonly designated Pines, several species furnishing excellent timber are known. For the most part they are found on the coast, but one species abounds in some parts of the interior. The *Banksias* are a numerous tribe with peculiar flowers of various colours, shaped like a bottle-brush. From the quantity of honey they contain, they are popularly called Honeysuckles. The timber is useful in ship-building. Another remarkable plant widely distributed throughout the colony is the so-called Grass Tree (*Xanthorrhoea*), which produces a flower resembling that of a bulrush. A powerful astringent gum is obtained from this plant.

62. PLANTS PECULIAR TO COAST REGIONS.—The foregoing families of plants are distributed over the whole of New South Wales; those about to be mentioned have a much more limited range, being confined to the Coast District. One of the most important is the *Cedar*, producing a wood of the most valuable description, which is used for the finer kinds of joiner's work and in the manufacture of furniture. The cedar requires a rich soil, and is obtained principally from the alluvial flats lying along the lower courses of the eastern rivers. It is also found on the slopes of the Liverpool Range, where the soil, being formed by the decomposition of trap-rock, is of high quality. Cedar may also be procured from certain parts of the Blue Mountains in the vicinity of Mount Tomah, where the soil is of the same description, and in the deep gullies and ravines. It appears to be restricted to the eastern side of the cordillera. A tree known as the White Cedar, but belonging to a different family, is confined to the same districts; it is one of the few deciduous trees indigenous to the colony.

63. Another family of trees limited in range to the Coast District is the *Fig* tribe, of which several species are known. They are remarkable for the immense size they attain, and the peculiarity in their manner of growth. Like the Banyan Tree of India, the Fig sends down suckers from above, which cling to the side of the trunk and finally unite with it, forming high buttresses. The wood is of no value, and the fruit is eaten by birds only. The Cabbage Palm is

found in rich soils along the whole of the coast northward of the 35th parallel, but is particularly abundant in the Illawarra District. It is also found in the part of the Blue Mountains known as the Kurrajong. This palm is a graceful tree rising to the height of sixty or eighty feet. It forms a peculiar and interesting feature in the landscape, to which it imparts a semi-tropical aspect. The Gigantic Nettle, or Stinging Tree, is also indigenous to the rich brush lands bordering upon the coast. Its average height is about forty feet, but specimens have been known to reach an elevation of a hundred and twenty feet. The leaves are large, often a foot in length, and of a vivid green when young. Their under surface is furnished with minute barbs which secrete a poisonous fluid. The sting consequently causes great pain and some danger. In the thick brushes, horses and cattle are liable to be stung by coming in contact with the nettle and—the former especially—then suffer severely, the sting sometimes proving fatal. Tree Ferns of great size and beauty are found in the same localities.

64. INDIGENOUS FRUITS.—It is somewhat remarkable that, as far as is yet known, there is in New South Wales no indigenous fruit or root capable of affording sustenance to any considerable number of human beings. In the great plains of the interior, a tree called the Quandong is found, bearing a fruit somewhat resembling a small peach in size but crimson in colour when ripe. Its taste is astringent. Another fruit resembling

a plum grows in Illawarra ; it is not eatable. The Native Cherry is the fruit of the *Exocarpus* ; the stone is outside of the pulp which is insipid. Another tree produces what at first sight appears to be a pear—hence called the *Native Pear*—but which, on closer inspection, proves to be only a wooden husk enclosing a small flat seed.

65. FLOWERS.—As if to compensate for this deficiency in fruits, the flowers of New South Wales are in many cases extremely beautiful. Perhaps the most beautiful is the Waratah, commonly called the Native Tulip. It has a slender woody stem, from four to six feet in height, and is crowned by a large flower which at first is of a delicate pink colour, but afterwards as it expands, deepens into a brilliant scarlet, and finally a rich crimson. The Christmas Tree—so named from its use as a decoration at that season like the English Holly—is abundant on the east coast, and extends westward over part of the Blue Mountains. Another splendid flower is the Gigantic Lily which grows to the height of twelve feet, and bears on its head a cluster of crimson flowers nearly a foot in diameter. The so-called Rock Lily bears a spike of pretty wax-like flowers. The Acacia flowers have already been mentioned. Of humbler pretensions, but still very beautiful, are some species of *Epacris*, which represent the Heaths of corresponding latitudes in Africa ; and the flower known as the Native Rose.

66. PLANTS PECULIAR TO THE TABLE LANDS.—The Table Lands appear to have no specially characteristic vegetation, and these districts are, indeed, less thickly timbered than the coast region. Some of the eucalypti and acacias are, however, peculiar to the Table Lands; and the high mountain ranges abound in plants of an Alpine character.

67. PLANTS PECULIAR TO THE PLAINS.—The vegetation of the Great Plains has some peculiarities. The sandy portion is usually covered with low scrub and a few large trees, as Gums and Pines; but where the rich soil prevails, the Myall forms the principal timber plant. Luxuriant grasses also abound, and sometimes grow to the height of six or eight feet. Another characteristic plant is the Salt-bush, so called from the saline matter it contains, and which causes it to be much liked by cattle and sheep. Certain parts of the Great Plains are covered with dense, impenetrable scrubs, called in the south the Mallee, and in the north, the Brigalow scrub. The former is a kind of dwarf Eucalyptus, thick and bushy; the latter is a species of Acacia, with rigid leaves and prickly spines. In the lagoons of the interior a very beautiful flower is found, called the pink Lotus. It has a large circular leaf sometimes two feet in diameter, and an odorous rose-colored flower measuring six inches across.

CHAPTER VII.

ANIMALS AND THEIR DISTRIBUTION.

68. GENERAL CHARACTERISTICS.—The animals of New South Wales, whether extinct or recent species be regarded, are not less remarkable and peculiar than its vegetable productions. In fact, a naturalist whose observations had been confined to other parts of the world, and who had there formed his conceptions of the appearance, habits, and character of various genera and species, would discover, on extending his researches to Australia, that his preconceived notions would often be modified, and sometimes directly contradicted by his new experience. This statement will receive illustrations in subsequent remarks.

69. ANIMALS PECULIAR TO THE COAST. —Commencing at the bottom of the scale of animated beings, we find the coast abounding in various species of the radiate animals, especially the jelly-like substances commonly termed Sea-Nettles, from their stinging powers. A kindred animal is the *Physalia*, or Portuguese Man-of-war. This remarkable creature consists of an “inflated bladder glowing in delicate crimson tints” and long tentacula or feelers of a deep purple,

extending beneath to a depth varying from a few inches to two feet. When touched, they are capable of inflicting a most painful sting. The Echinus or Sea-Hedgehog is also an inhabitant of the coast waters. Oysters are found attached to the rocks or buried in the mud and sand; they are of good flavour and sometimes contain pearls. Prawns of large size, and a species of Crayfish, locally termed the Lobster, are also abundant. Several kinds of Crabs are common, but do not require individual notice. The sea and the mouths of the great rivers literally swarm with fish, many kinds being excellent food, as the Schnapper, Gar, and Mullet. Others are remarkable for their size and destructive powers, as the Sword-fish, Sawfish, and Shark. Of the latter there are several species found in the Australian seas, and one, the Port Jackson Shark, appears to be characteristic of that locality. It is remarkable as being the most common existing representative of an extinct genus of fishes now found among the fossils of the secondary strata, but which once peopled the seas of the northern hemisphere. Of curious fishes, the Devil-fish, the Glass Eel, and the Hippocampus or Seahorse are the most noted. Formerly Seals appear to have been abundant on the coast, but are now restricted to a few localities. Whales, both Black and Sperm, are frequently seen and occasionally visit the bays and inlets for the purpose of calving. One species of Sperm Whale appears to be peculiar to the Australian Seas. Two kinds of Water Snakes are known to infest the coast, and are

sometimes thrown upon the shore by storms. One species is harmless; the other is very venomous, as are most of the members of this family. The Turtle is occasionally found near the northern boundary of the colony, but is much more frequently met with on the coast of Queensland. Among the sea-birds that haunt the coast, the most remarkable are two or three species of Albatross—the Wandering Albatross being the most conspicuous. Several species of Gulls, Petrels, and Terns also abound.

70. LAND ANIMALS.—INSECTS, &c.—The land animals of New South Wales are distributed with tolerable regularity throughout its whole extent, the difference of climate having but little effect. Beginning, as before, at the bottom of the scale, we first notice the Leech, which is abundant in the swamps and fresh water lagoons on the Table Lands. Another kind is found on the land, in the thick brushes of the Illawarra and other coast districts. Among the insect tribes, the Mosquitos and Sandflies require to be mentioned on account of the annoyance they occasion, which, however, is not experienced on the Table Lands. Ants of various kinds are abundant, one species being an inch in length and armed with a formidable sting, with which it inflicts a painful wound. The native Bees are small in size and stingless; their honey differs from that of the Honey Bee in appearance and flavour. The Tree-hoppers, called in the colony Locusts, are remarkable for their shrill,

incessant noise—like the Cicada (or Cicala) of southern Europe. The true Locust is not found in New South Wales, but large kinds of Grasshoppers are abundant. Many beautiful Butterflies of rich colours are to be seen, as also those curious insects, the Mantis and Walking Stick, resembling animated leaves and twigs. Several Beetles and a species of Bug are indigenous: Spiders of large size and some of curious habits are also common. The Tarantula and the Centipede are both venomous, but not to a dangerous extent. Specimens of the latter have been found eighteen inches in length. There are two or three insects which are luminous in the dark, like fireflies. Crayfish are found in the ponds, or “water-holes,” of the interior, west of the Dividing Chain; and in the rivers, a fine fish commonly known as the Murray River Cod, being named after the stream in which it was first obtained and where it is still peculiarly abundant. Eels abound in the eastern waters.

71. REPTILES.—The reptile class is well represented. Among the Frogs is one wearing a livery of green and gold; others are the Tree-Frogs which are enabled to climb trees by the suckers on their feet. Several species of fresh water Tortoises of small size are found on the Table Lands and west of the Dividing Chain, and one at least is known to inhabit the Coast District. Of Lizards, there are numerous varieties, some of them being very curious in form and appearance. The

largest is popularly termed the "Guana," for "Iguana," but the name is improperly applied. The so-called Guana attains a length of from two to eight or nine feet, and is carnivorous. Some of the lizards are serpent-like in their appearance, being wholly without external legs. Snakes of many different families are found in various parts of New South Wales, several of which including the greatest number of species, are highly venomous. Of the non-venomous snakes, the more conspicuous are the Diamond and Carpet Snakes, which represent the Boas of intertropical America. These are nocturnal in their habits, as is also the Brown Tree Snake which, however, belongs to a different family. The Green Tree Snake is a handsome creature, diurnal in its habits, and living upon insects. The Viper family supplies what is commonly believed to be the most deadly snake found in the colony—the Death Adder, which is widely distributed throughout the country, but is most frequently found in dry sandy situations. The Black Snake is, perhaps, one of the most common; it is of a black colour on the back, and red beneath. The Brown Snake is remarkable for its habit of turning when chased, and darting at its pursuers. On this account it has been named the Darting Snake. The Whip Snake, so called from its appearance resembling the thong of a whip, is also common. To this list may be added the Brown-banded Snake which has the power when irritated of expanding the sides of its neck into a broad flat hood, and is highly

venomous. This snake, and numerous other members of the same genus—*Hoplocephalus*—are peculiar to Australia.

72. BIRDS.—The Birds of New South Wales are remarkable for the beauty of their plumage, the oddity of their appearance, or some peculiarity in their habits which distinguishes them from birds belonging to the same family in other parts of the world. None of them possess power of song worthy of comparison with the strains of European song-birds. More than twenty members of the Falcon family are known to inhabit New South Wales. Among these may be specified the Wedge-tailed Eagle, which is of large size, bold and fierce. It is a characteristic of Australian eagles that they do not disdain to feed on carrion. A White Hawk, with eyes either yellow or red, is not uncommon. Six species of Owls inhabit New South Wales. One of these, the Boobook, is popularly called the Australian Cuckoo, on account of its cry which strongly resembles that of the latter bird, but it is uttered principally at *night*. Among the passerine birds of New South Wales are several species of *Podargus*, one of which is named by the colonists “More Pork,” from its singular cry. An allied bird is the New Holland Goatsucker. The Swallow family is represented by the Australian Swift (sometimes called the Needle-Tailed Swallow), the largest of the whole tribe; by the Fairy Martin, which constructs flask-shaped

nests ; and by other less known species. The Dollar Bird belongs to an allied family, and receives its name from a circular white spot on the inside of each wing. The Laughing or Giant Kingfisher differs in habits from most of its congeners in not catching fish. Its odd appearance and strange cry, resembling the wild laugh of a maniac, render it a somewhat remarkable bird. Several other members of this family are also found, conspicuous among which are the Australian, the Tiny, and the Azure Kingfishers. Among the slender-billed birds, the Rifle-Bird is one of the most remarkable, being, according to Gould, the most gorgeous of all Australian birds. The Dicæum weaves a white, purse-shaped nest, and suspends it from a branch on the top of a tall tree. Numerous species of Honey-eaters are common, the most remarkable being the Bell-Bird, so called from its note which resembles the tinkling of a sheep-bell. Another example of this genus is the Friar Bird, which has a bald head as if shaven, and the Wattle or Gill Birds which have fleshy wattles on each side of the head. The family of Creepers, consisting for the most part of very small birds, has, among others, a representative in the magnificent Lyre Bird which obtains its popular name from the graceful form and arrangement of its tail feathers. This beautiful bird is confined to the eastern portions of the colony, but has been seen as far to the west as the Tumut Range. The Tooth-billed tribe has many representatives. The Pinc-pinc, though a small bird, constructs a nest of large dimensions and

haped like a gourd, the entrance being through the neck. The Emu-Wren has tail-feathers similar in structure to those of the emu, and another bird of the same genus is prettily marked with bright blue. The Flycatchers are remarkable for the oddness of some of their habits and the singular form and neatness of their nests. Another genus is represented by the Diamond Bird which, in addition to its beautiful marking, is remarkable for its habit of constructing its globular nest in a burrow of its own making. Several species of Wood Swallow are common. Birds of the Cone-billed tribe are numerous in New South Wales. The Magpie, as the Piping Crow is popularly termed, is well known for its strange habits and imitative powers. The Crow differs in voice from the Crow of the Northern Hemisphere, possessing a greater variety of notes. The Bower Birds, of which two species are known, construct bowers or arbours, and ornament them with any gay material procurable. The use of these structures is not well understood. The Gouldian Finch is a beautiful little bird, though destitute of the powers of song which characterise the family in other countries. New South Wales is distinguished for the number, variety, and beauty of its scansorial birds. Parrots and Cockatoos are especially numerous. Of the former, the Rosehill Parrakeet, the Cockatoo Parrakeet, and the Grass Parrakeet, are remarkable for beauty of form or plumage. The sulphur-crested Cockatoo is a very common bird, and the Banksian

Cockatoo is remarkable for its rich black colour. The Cuckoo family is represented by the Pheasant Cuckoo, a remarkably handsome bird, bearing some resemblance to a pheasant. Two other species of Cuckoo are known to inhabit New South Wales, and the Channel-bill is a curious bird belonging to the same family. Several species of pigeon are found in New South Wales—the Topknot Pigeon and the Wonga Wonga being confined to the Coast District, the Crested Pigeon to the interior, and the Bronzewing migrating to some extent. Of the Gallinaceous birds, there are two indigenous species which are remarkable for their peculiar habits in connection with rearing their young. They are the Leipoa and the Tallegalla—the Native Pheasant and Brush Turkey of the colonists. Both lay their eggs in mounds of earth and vegetable matter raised by themselves, the eggs being hatched by the heat generated through the fermentation of the mass. Quails of several species are also abundant. The Emu was formerly common in all parts of New South Wales, including the coast district, but is now confined to the great plains. A species of Bustard, commonly known as the Wild Turkey, inhabits the same region. Among the Wading Birds may be mentioned the Plover, various species of Cranes, Herons, and Ibises. The most remarkable are the great Australian Crane or Jabiru; the Nankeen Night Heron, and the Straw-necked Ibis. The Native Companion, two or three species of Spoonbills, the Bittern, the Curlew, and many

smaller birds may be added to the list. Those curious birds, the Avocet and the Woodcock, also deserve mention. The Cereopsis or Cape Barren Goose is the first of the swimming birds that claims attention ; it is found upon the coast. The magnificent Black Swan is peculiar to Australia, and is abundant in many parts of New South Wales. Several kinds of Ducks are also common, one species being remarkable on account of the habit of building its nests in a tree. The Darter and a large species of Pelican are found in the rivers.

73. MAMMALIA.—Several species of Bats inhabit New South Wales. One, which attains considerable size, is popularly known as the Flying Fox, from the resemblance which its head bears to that of the last named animal. These Bats sometimes congregate in vast multitudes in the brushes and forests of the coasts, apparently for the purpose of breeding, and commit great havoc among the fruit-trees. The only land animal representing the carnivorous order is the Dingo or Native Dog, which is spread over the entire continent, but is now believed not to be indigenous. The Beaver or Water Rats are peculiar to Australia, and, with numerous other species represent the rodent animals. With two exceptions, all the remaining indigenous animals of the class Mammalia, belong to the Marsupial Order. Some of these are of very minute proportions, while others attain a considerable size. They are divided into several genera, of which the following

are examples. The Petaurists are furnished with a parachute-like expansion of the skin along the flanks, which is attached to the fore and hinder limbs. The Flying Mouse, the smallest of the tribe, is a beautiful little animal about the size of the common mouse; it is common on the coast. The "Flying Squirrel" and the "Sugar Squirrel" are popular names for larger species of Petaurists; but the largest is known as the Taguan. The next genus, the Phalangers, are destitute of the parachute, but possess a prehensile tail. Two species are found in New South Wales where they are generally known as "Opossums." The most common species is the Vulpine Phalanger, so called on account of its fox-like appearance and nature. The Koala, or Native Bear, represents the next genus, and is destitute of tail. It is a peculiar animal, having a somewhat bear-like aspect, but resembling in some of its habits the Sloths of America. Like all the animals before mentioned, it is nocturnal. We next come to the Kangaroos and their congeners the Wallabies, Pademelons, and Kangaroo Rats. These are pretty generally distributed over the colony, though each species affects special localities, some the open plains or lightly-timbered forest lands, others thick brushes and scrubs, and others rocky and broken places. The Bettongs and Kangaroo Hares bear a general resemblance to the Kangaroos; the Bandicoots and the Chæropus, although belonging to the same family, vary considerably in appearance and habits. The Wombat, or Badger, as it is commonly called,

differs greatly from the other marsupial animals, and more nearly resembles the rodents. It is a nocturnal animal, and makes its habitation in a deep burrow. It is extensively distributed throughout New South Wales. The Dasyures, of which two species inhabit this colony, where they are popularly known as "Native Cats," are carnivorous as to food and nocturnal in their habits. The "Brush-tailed Phascogale" is an animal of similar habits, but is not so prettily marked as the Dasyure. There are also numerous species of pouched Mice. Those curious animals, the Platypus and the Echidna, are peculiar to Australia and Tasmania. They are popularly known as the Duckbill and the Hedgehog. Resembling these to some extent in structure is the Brush-tailed Ant-eater (*Myrmecobius*) which as the name denotes, feeds upon ants and their eggs.

74. EXTINCT ANIMALS.—It will be seen from the foregoing statements that the fauna of New South Wales is peculiar, and is chiefly marsupial. This statement applies even to the fossil remains which have been discovered. Among these is a gigantic creature called the *Nototherium*, supposed to be a species of *Phalanger* which, when living, must have approached in size to the *Hippopotamus*. Similar remains of animals named *Diprotodon* and *Zygomaturus* have been found, as also fossilized bones of giant Kangaroos, of various other species of marsupial animals, and of enormous birds. The obvious inference

is, that Australia was, even in former ages, tenanted by animals of the same kind as inhabit it at the present day.

75. CLASSES OF ANIMALS.—In considering the Mammalian animals of New South Wales, we are struck with two obvious facts. In the first place, we notice the entire absence of many important orders—the Quadrumanous, the Pachydermatous, and the Ruminant—and the presence of only one of the true Carnivora, and that probably of recent introduction. Secondly, it would seem as if the Marsupial order included creatures which might be accepted as representatives of various orders of animals. For example, the Canine and Feline families of Carnivora are respectively represented by the *Thylacinus* and the *Sarcophilus*—Native Wolf and Native Devil—which however seem to be confined exclusively to Tasmania. The *Dasyurus* corresponds in some measure to the Weasel, and the Koala to the Sloth. Besides the true rodents, these animals find a partial representation in the Wombat.

76. ANIMALS INTRODUCED.—It may not be out of place to remark here that all the common domesticated animals of Europe have been introduced into New South Wales, and have been found to flourish, so that it is now estimated that there are in the colony 16,500,000 sheep, 2,200,000 cattle, 337,000 horses, and 250,000 pigs. Of the rarer kinds of animals, it

may be mentioned that a herd of Alpacas was introduced from South America. These animals are now completely naturalized in the colony, although their numbers have not increased to any great extent.

77. THE AUSTRALIAN MAN.—The native Man of Australia is usually said to belong to the Papuan or Austral-Negro race; but there are some reasons for believing that he has no very close affinities with any other class of human beings. The Aborigines have undoubtedly been under-estimated, both as regards physical and mental endowments, some writers having described them as brutish in the extreme, and as ranking but little higher than the Gorilla. A more extensive experience of their good qualities has led to the formation of a more correct estimate of their relation to mankind in general. It is necessary to bear in mind, in speaking of the Aborigines, that they are marked by certain differences of appearance, language, and customs, which tend to prove that they are not all of the same race, and it is therefore difficult to describe them in any detail, and, at the same time, avoid misstatements. In colour, the Aborigines vary from a dark chocolate to black; the hair is black, coarse, and lank, but sometimes curly or woolly; the eyes dark and brilliant; the nose prominent and the mouth large. They are in general, slightly but strongly built, and the legs appear to be almost destitute of calf. The languages spoken by the Aborigines vary so greatly that tribes resid-

ing at no great distance from each other are mutually unintelligible. Their speech is, however, generally euphonious, and as far as known seems to possess a great variety of inflections and a complicated syntax, resembling in this respect the languages of many barbarous nations. As regards manners and customs, laws, government, or religion, comparatively little is known with certainty; for owing to the jealousy of the Aborigines, the opportunities for observation have been small, and most of the persons who have enjoyed such opportunities have not known how to turn them to profitable account.

78. THE PRESENT POPULATION.—The original inhabitants of the country have been deprived of their possessions by the European colonists. These and their descendants, according to the census taken on 2nd April, 1871, number 503,981 persons, of whom 275,551 are males, and 228,430 are females. The distribution of the population may be thus exhibited:—

Coast District	300,620	60	per cent.
Table Lands	162,533	32	„
Great Plains	40,828	8	„

Assuming the area of the colony to be 323,437 square miles, there would be on an average less than two inhabitants to the square mile. In the Coast District, inclusive of Sydney, the average is about 7·5, or, exclusive of Sydney, 4 persons to a square mile. In the Table Lands the average is 2·7 persons to a square

mile ; but on the Pastoral Districts of the great Plains, the population barely reaches one inhabitant to five and a half square miles.

CHAPTER VIII.

INDUSTRIAL OCCUPATIONS.

79. GENERAL REMARKS.—New South Wales exemplifies to a remarkable degree the truth of the proposition that the occupations of any people will depend, to a great extent, upon the physical geography of the country they inhabit. It will be found that, speaking generally, the occupations of the people are different in the three physical divisions of the colony.

80. AGRICULTURE.—The cultivation of the soil is confined principally to the coast region, especially the valleys of the rivers on the eastern slope, and to portions of the Table Lands, while it is scarcely attempted on the interior plains. The objects of cultivation vary greatly according to the soil and climate of the different districts. In the deep rich alluvial soil bordering upon the eastern streams, *Maize* is the staple product, and of this grain about four millions of bushels are raised annually. Of late years, various kinds of millet have been introduced and one, the *Sorghum*, is grown chiefly for use as fodder, though some attempts have been made to manufacture sugar from this plant. *Wheat* is successfully grown upon the same soils and, perhaps to greater perfection, on the Table Lands which, from

their lower mean annual temperature, are better adapted to the cultivation of the hardier cereals. In the warmer districts of the colony, wheat is subject to the ravages of certain insects which render it impossible to preserve the grain long after harvest, but this inconvenience is not felt on the Table Lands. Under favorable circumstances as regards soil, season, and skilful cultivation, the wheat of New South Wales equals, if it does not surpass, that produced in any part of the world; and as a general rule, it is found to possess a larger portion of nutritive ingredients than is common. The yield of wheat in 1869-70, exceeded three millions of bushels. The poorer soils in the counties of Cumberland and Camden are much used for the cultivation of *Oats*, principally for fodder, the plant being cut while green and made into hay. In the same localities *Barley* is cultivated chiefly as a green crop, little use being made of the grain itself, either as meal or for malting. The *Potato* is cultivated on the alluvial soils of the coast rivers and also upon the Table Lands, and in both cases with great success. About 50,000 tons were produced in 1869. For several years attempts had been made on a very limited scale to grow the *Sugar-cane* on some of the northern rivers, where the climate approaches more nearly to the tropical character; but the issue of these experiments long remained doubtful. But, since 1867, farmers on the eastern rivers, from the Manning northward to the Tweed, have engaged in sugar cultivation with considerable spirit and success. In that year, 8

tons were produced ; in 1868, 60 tons ; in 1869, 1457 tons, in 1870, 1590 tons. Sugar growing seems likely therefore to become one of the staple industries of the colony. Many districts seem to be peculiarly adapted to the cultivation of the *Grape* and the production of wine. Four districts may be specially noted as pre-eminent in vine culture:—The Hunter River Valley ; the Counties of Camden and Cumberland ; the western slope of the Northern Table Land ; and the upper portion of the valley of the Murray. The production of wine now amounts to about half a million gallons annually, and about a thousand tons of grapes are also sold for table use. In addition to these products of the vineyard, brandy averaging about two thousand gallons a year is also obtained. The Hunter Valley and the districts bordering upon the sea to the north and south of Sydney are also well suited to the *Orange*, which fruit, in ordinary seasons, is produced in surprising quantities, and forms an important item of exportation to the neighbouring colonies. Other fruits as the *Peach*, *Nectarine*, *Apricot*, *Plum*, &c., are also produced in the warmer districts of the colony in large quantities. The country about Sydney is particularly celebrated for its orchards. In the colder districts, English fruits, *Gooseberries*, *Currants*, &c., flourish, but are not made objects of cultivation to any noteworthy extent, as the distance from market and defective means of communication have hitherto rendered the task of growing them unprofitable. The *Fig*, and many semi-tropical fruits are cultivated in the

warmer districts. *Lucerne* is grown to a great extent on the Hunter and Hawkesbury Rivers for hay, and is largely exported. *Tobacco* still receives the attention of some agriculturists. The localities suited to the production of tobacco are the rich alluvial soils on the banks of the eastern rivers, especially in sheltered valleys. Up to the present time, *Cotton* has been grown only as an experiment, but from the suitability of the soil and climate in the coast district, there is good reason to believe that in the course of a few years, this plant could be included among the staple products of the colony. The cultivation of the *Mulberry-tree* with a view to the production of silk has excited some attention, and it seems to be very generally admitted that this branch of industry can be profitably followed, but as yet little has been accomplished towards rendering it one of the recognised pursuits of the agricultural class. The *Olive* flourishes in the coast region, and eventually the cultivation of this tree and manufacture of oil will, in all probability, afford occupation to great numbers of colonists, and supply the demand now met by large importations from other countries. It is calculated that about one-third of the inhabitants of the colony are engaged or interested in agricultural pursuits.

81. PASTURAGE.—The breeding and pasturing of cattle as a separate pursuit, is carried on to some extent on the Table Lands; and, to the exclusion of almost every other occupation on the Great Plains of

the interior. Sheep, horned cattle, and horses are reared in great numbers, and the various products obtained from them furnish a considerable proportion of the exports of the colony, besides supplying articles of food, clothing, and domestic use for home consumption. A large number of persons is engaged in or connected with pastoral pursuits. The products obtained by this industry are, *wool*, of which about 47,500,000 lbs. were exported in 1870; *tallow*, beef and mutton, obtained by boiling down cattle and sheep, 1198 tons; *hides*, 50,000; *horns and bones*, 450 tons. The value of these products may be thus estimated:—

Wool	£2,741,141
Tallow	223,787
Hides	120,971
Bones and Horns	2,311
Live Stock.....	769,892

Total £3,858,102

The finest wool is produced in the Mudgee district; it is not surpassed in quality by that of any other country in the world. But from the great variety of soil and climate to be found in New South Wales, every description of wool may be grown in some portion of the territory. Great attention is now paid to this subject as well as to the breeding of sheep and cattle. Horses have greatly increased in numbers of late years, but have generally deteriorated in quality.

82. MINING.—The varied mineral productions of the colony give employment to large numbers of people; and when the population has increased, and the country has been more minutely explored, this branch of industry will undoubtedly receive very extensive developments. At present, mining operations are confined to the Table Lands and the Coast Region. In the latter district, *Coal* is the chief object of search. The only coal-fields now worked to any great extent are those of Illawarra, Hartley, and the Hunter Valley. In the places named, mining operations are constantly increasing in extent and importance, and the raising of coal promises to become one of the staple occupations of the country, and the material itself one of the leading articles of export. No fewer than 868,564 tons of coal were raised in 1870 of which 578,389 tons were exported. Hitherto coal-mining in New South Wales has been attended with few of the engineering difficulties, and none of the dangers to human life that in England and other parts of the world render this pursuit hazardous to the miner and embarrassing to the capitalist. The mines not being of the enormous depth of those worked in the English coal-fields, are not liable to flooding, and are comparatively free from *fire-damp* and *choke-damp*, which so frequently prove fatal to life. Few accidents from fire-damp are known to have occurred up to the present time. *Kerosene Shale* is worked at Hartley and Illawarra. It is used for the manufacture of Kerosene oil of which about 350,000

gallons are produced annually. This oil is of excellent quality when properly refined. The number of persons engaged in the search for *Gold* fluctuates greatly, but ranges usually from 20,000 to 40,000. The localities in which this metal is obtained in any quantity are situated either on the Table Lands or in connection with mountain ranges branching from them. These localities have already been described in some detail. The quantity of gold known to be procured during the last ten years was about three and a quarter millions of ounces, valued at more than £12,500,000 sterling. In addition to this, it is probable that a large quantity of gold was obtained, but being kept in the hands of the finders or carried by private parties to other colonies, the amount was never recorded. It is estimated that gold to the value of £30,000,000 has been obtained from the mines of the colony, since the first discovery in 1851. Within the last two years "reefing" has excited great attention and, from the surprising richness of some of the reefs on the Western Goldfields—those at Hill End and Gulgong in particular—enormous yields of gold have been obtained. It is likely therefore that in future this branch of industry will be more largely and successfully followed than hitherto. A few persons are occupied in mining for *Silver* in conjunction with other metals, and judging from the known richness of the ores, it is probable that the number will in time be greatly augmented. *Copper* of the best quality is plentiful in various parts of the colony, but is not systematically worked except in the

western portion of the southern Table Land. From the abundance of the metal, copper mining is capable of vast extension and, with increased population and improved roads, will doubtless afford employment to great numbers. At present, the only mines worked are in the neighbourhoods of Bathurst and Goulburn, and in the Monaro District. *Iron* was until lately raised and smelted at the Fitzroy mines near Berrima. Up to the present time, mining for other metals can scarcely be said to have commenced, notwithstanding that the existence of many valuable mines is well known. Some attempts have been made, however, to work the deposits of *Lead*, *Cinnabar*, and *Tin*, and for a time the search for *Diamonds* gave employment to a considerable number of persons.

83. FISHERIES.—The coasts of New South Wales abound in fish of excellent quality and various kinds. Comparatively little has been done, however, towards the development of this branch of industry; and some departments formerly carried on with great vigour, have either greatly declined or have been abandoned altogether. For example, the whale and seal fishery formerly gave employment to a considerable number of people and was a highly remunerative pursuit, but for some years past it has languished, and has passed into other hands, chiefly American. The oyster, shrimp, and lobster fisheries still employ a few persons, but there is no doubt that these branches can,

and must be extended very largely as the population increases.

84. MANUFACTURES AND COMMERCE.—The industrial occupations connected with manufactures are gradually becoming more extended and various. Thus, in *Metals*, there are manufactures of Agricultural Implements and of Machines generally; Iron and Tin Works; Iron, Brass, and Copper Foundries; Lead Works; Type Foundries; and Iron and Copper Smelting Works. The *fictile* manufactures are Potteries, and Tile and Drainpipe Works. Other manufactures which have minerals for their raw material are those employed in the production of Bricks, Lime, Salt, Sulphuric Acid and Kerosene Oil. *Wood* affords occupation to a large number of people who are employed in Cabinet Work, in the manufactures of Vehicles, in Ship and Boat Building, and in the building trades generally. The colony also possesses some *textile* manufactures, wool being woven into cloth to the extent of about 200,000 yards annually. Those manufactures for which *skins* furnish the material are even more flourishing; *Tanneries* and other establishments for making leather are numerous; and large numbers of persons are engaged in the manufacture of boots and shoes. *Provisions* of various kinds are also manufactured. The chief are Meat-preserving, the manufacture of Maizena, Jams, Sugar, and Confectionery. Wine making, distilling, brewing, and the manufacture of non-fermented bever-

ages are also important. In addition to these, the following manufactures also deserve mention—Tobacco, Tallow, Soap, Candles, Brushware, Clothing, Glass, Ice, Paper, and Rope. Other industrial occupations allied to manufactures are those afforded by Boiling-down and Wool-washing establishments, Saw Mills, Dry and Floating Docks, Dye Works, Gas Works, Patent Slips, Railway Works, and Water Works. A large and increasing proportion of the population of the colony is engaged in manufacturing pursuits which give promise of considerable extension at no distant period. The commercial dealings of the colony may be divided into foreign and inland trade, in which latter is included the coasting trade. A large per centage of the adult male population is connected with trading pursuits more or less closely, exclusively of seamen employed in coasting vessels. This branch of industry is therefore of great importance. The foreign trade is carried on with—1. The United Kingdom; 2. The Australian colonies, including New Zealand; 3. Various European countries, including France, Holland, and Portugal; 4. United States and Canada; 5. China; 6. Manila; 7. India and the East Indian Islands; 8. The South Sea Islands and New Caledonia; 9. Mauritius. The value of the imports into the colony may be estimated at about seven millions and a half sterling yearly, and the exports at the same amount. Among the imported articles most deserving of notice may be mentioned—1. *Manufactured goods* of various kinds,

such as cotton, linen, woollen and silk fabrics ; cutlery, hardware, implements, machinery, clocks and watches ; glass, porcelain, and earthenware ; cordage, rope, furniture. 2. *Metals*, unmanufactured—Iron, tin, lead, and copper. 3. *Foods*—Flour and grain, fruits, tea, sugar, coffee, confectionery, fish, oilmen's stores, spices, potatoes, bacon and hams, salt, butter and cheese. 4. *Beverages*—Wines, spirits, and fermented liquors. 5. *Clothing*—Haberdashery, hats, bonnets, hosiery, and gloves, india-rubber, leather (boots and shoes), millinery. 6. *Drugs* and chemicals. 7. *Building Materials*—Bricks, slates, timber. The principal exports, being the production or manufacture of the colony, are bark, butter and cheese, candles, drays, coal, coin (gold), eggs, fish, flour, fruit, furniture, gold, grain, gum, hay, honey, horsehair, leather, lime, live-stock, machinery, provisions, skins, soap, tallow, timber, tobacco, wine, and wool.

85. TABLE OF IMPORTS AND EXPORTS—The following table will give approximately the value of the trade carried on with different countries.

<i>Country</i>	<i>Imports from</i>	<i>Exports to</i>
The United Kingdom	£3,250,000	£3,000,000
The Australian Colonies	4,150,000	3,800,000
Mauritius and Bourbon	438,000	75,000
China	325,000	70,000
India and E. I. Islands	300,000	1,300,000
United States	155,000	40,000
South Sea Islands	70,000	180,000
France	60,000	

<i>Country</i>	<i>Imports from</i>
Manila	55,000
Holland	16,000
Portugal	5,000

86. INLAND AND COASTING TRADE.—The coasting and inland trade consists in distributing the imported articles and the productions of the various districts of the colony. Sydney is the centre from which this commerce extends its branches. The goods imported are carried into the interior by drays which are laden on their return with wool, hides, grain, or other produce. In the same way the steamers and small coasting vessels convey merchandise to the various maritime settlements, and are then freighted with local products. The goods despatched from Sydney are principally various manufactured articles, flour, wines, spirits, fermented liquors, tobacco, cedar-wood furniture. The products of the interior which are forwarded to Sydney are gold, wool, horses, cattle, sheep, hides, hay, grain, potatoes, fruit, and timber; and, by sea, cedar and other woods, grain, live-stock, butter and cheese, shells for lime-burning, and coal. A large trade is also carried on between New South Wales and the contiguous colonies in horses, cattle, and sheep.

CHAPTER IX.

INTERNAL COMMUNICATION.

87. GENERAL CHARACTERISTICS.—The means by which communication may be carried on between the various parts of a country, is a matter of great importance as regards its material prosperity and advance in civilisation. Where such communication is difficult, there is a strong tendency to retrograde, unless natural obstacles can be overcome by skill and labor. Communication is of a two-fold nature—that intended for the conveyance of goods, and that adapted to the transmission of intelligence. The means themselves are navigable rivers, canals, common roads, railroads, and electric telegraphs. New South Wales is unfortunate in not possessing some common natural advantages, and in suffering from some serious obstacles to effective internal communication. For example, its navigable rivers are insignificant in extent compared with the vastness of its territory. Again, its principal mountain chain is situated near the coast, and is so rugged in its character that, for many years, communication between the two slopes was impossible, and is still difficult. Much has been done, however, to remove these disadvantages, and to extend and perfect the means of communication.

88. NAVIGABLE RIVERS.—Most of the rivers on the eastern slope are more or less navigable, especially for vessels of small tonnage. The Clarence is navigable for vessels of large size for seventy miles from its mouth, and the Hunter for fifty. The Richmond, MacLeay, Manning, Hawkesbury, Shoalhaven and Clyde are also navigable for shorter distances. At certain seasons, the Murray, Darling, and Murrumbidgee are navigable for vessels of light draught for distances of about 1000 and 600 miles respectively; and when some of the obstructions have been removed, the navigation will be rendered less dangerous, more certain, and more frequent. Even now, the opening of these rivers has proved of great benefit to the districts through which they flow, by providing an outlet for produce and a means of obtaining supplies. No *canals* have yet been formed in New South Wales.

89. COMMON ROADS.—Immense sums of money were expended in former times upon the *common roads* of the colony, but until very recently they were little better than tracks cleared of timber. Great efforts have been made of late years to improve the highways, and notwithstanding great difficulties from want of proper materials and labour, and the destruction of bridges by floods, a sensible advance has been made. These roads are divided into three main lines, named respectively the Great Southern, the Great Western,

and the Great Northern Roads. The two former commence at Sydney : the last at Maitland. The Great Southern Road takes a general, but irregular, southerly direction, passing through Campbelltown and Berri-
ma to Goulburn. Thence it proceeds by way of Yass and Gundagai to Albury. Roads branch off from the main line from Goulburn to Braidwood, and from the same place to Bombala, passing through Queanbeyan and Cooma. The Great Western Road passes through Parramatta and Penrith, and across the Blue Mountains to Bathurst, whence it is continued through Orange to Wellington and Dubbo. This road leads through the celebrated pass of Mount Victoria, and is, in some places, cut out of the face of the mountain, and in others, carried across vast chasms on immense masses of masonry. The Great Northern Road commences at Maitland and passes through Singleton, Muswellbrook, and Murrurundi, across the Liverpool Range to Tamworth, thence across the Moonbi and New England Ranges to Armidale. Many important branch roads lead in various directions from the main lines, and where *roads* properly so called terminate, *tracks* are used which receive no attention and undergo no repair. The main roads and some of the branch roads are now provided with substantial bridges over the more important streams ; but when rivers intersect the tracks, they can only be crossed by fording. Some notion may be formed of the extent of the

roads and tracks in common use from the fact that the total length of the various lines travelled by the post exceeds 15,000 miles.

90. RAILWAYS—Three lines of railway have been commenced. These are respectively termed the Great Southern, the Great Western, and the Great Northern Railways. To a considerable extent they follow the same general direction and correspond to the common roads bearing the same names. The first of these is designed ultimately to connect Sydney with the towns on the Murray. At present, it is completed as far as Goulburn, passing through the towns of Liverpool, Campbelltown and Picton, and the rich agricultural and mineral districts of Camden and Argyle. The Great Western Railway branches from that just described near Parramatta, and will terminate for the present at Bathurst. After passing the towns of Parramatta and Penrith, this line crosses the Blue Mountain Range, the engineering difficulties to be overcome having been very great. At Hartley it passes near the rich coal and kerosene shale deposits. A branch from this line leaves Blacktown and is continued to Windsor and Richmond. The Great Northern Railway begins at Newcastle, passes through Maitland, Singleton, and Muswellbrook to Murrurundi. It may be roughly described as running parallel to the Hunter River. About 400 miles of railway have been completed.

91. **ELECTRIC TELEGRAPHS.**—The electric telegraph is one of the most important means of communication. Each of the main lines of road has its telegraph line to correspond, and there is full telegraphic communication between Sydney and the neighbouring colonies of Queensland, South Australia, and Victoria. The following are the principal telegraphic lines in operation, or in progress :—

1. *The Southern Line*, extending from Sydney to Albury, with branches to—1. Kiama, Shoalhaven, and Cape St George ; 2. Braidwood and Moruya ; 3. Queanbeyan, Cooma, Kiandra, Bombala, Bega, Eden, and Cape Howe ; 4. Wagga Wagga, Conargo, and Hay ; 5. Deniliquin, Moama, Balranald, and Wentworth.

2. *The Western Line*, extending from Sydney to Forbes *via* Bathurst, with branches through Sofala, to Mudgee and through Orange to Dubbo.

3. *The Northern Line*, extending from Sydney to the northern boundary of the colony, with branches—1. To Newcastle ; 2. To Mudgee ; 3. From Tenterfield to Grafton ; 4. From Armidale to Kempsey and Port Macquarie.

The total number of miles of telegraph in operation is above 5000.

92. MARITIME ROUTES.—It is proper to notice here the means of communication which exist between localities on the seaboard or on the coast-rivers. Large numbers of coasting vessels are employed in the conveyance of goods and passengers between these places ; and three distinct lines of steamers are engaged in similar traffic. They are the Clarence River line ; the Hunter River ; and the Illawarra and South Coast line. These are exclusive of steamers employed in the intercolonial trade.

CHAPTER X.

POLITICAL AND SOCIAL ARRANGEMENTS.

93. THE LEGISLATURE.—New South Wales being a British colony, is a dependency of the British Crown, and its inhabitants enjoy all the advantages and privileges of British subjects. Unless superseded by the enactments of the local Legislature, the laws are identical with those of England. All the forms and principles of the British Constitution, and all the British legal usages, are in force in the colony; and British money, weights, and measures are universally adopted. The Sovereign of Great Britain is the supreme ruling power, and appoints the governor of the colony but practically the local government may be regarded as independent, inasmuch as the home authorities interfere only on subjects of Imperial, as distinguished from purely Colonial, interest. The Legislature of the colony is composed of two branches, named respectively the Legislative Council and the Legislative Assembly. The constitution of the former has not yet been finally determined; at present the members are appointed by the Governor and hold their seats for life. Members of the Assembly, seventy-two in number, are elected by the people, the suffrage

being of the widest possible description. There is no restriction in the choice of candidates, except such as are obviously necessary for the welfare of the country. Of this kind are the requirements that a member shall be of full age and sound mind, that he has not been attainted or convicted of treason or felony, and that he is not the subject of any foreign State. For representative purposes, the colony is divided into electoral districts, each, according to its population and importance, sending one or more members to the Assembly. The electors include all men of adult age in the district, provided they have resided there not less than six months and are subject to the monarch of Great Britain and Ireland. The votes are given by ballot. All laws passed in the colony are enacted by the two Houses, but the Assembly claims the sole right to interfere in matters of taxation and expenditure of public money. Each Parliament lasts five years unless previously dissolved by the Governor. In either case a fresh election of members is necessary.

94. THE EXECUTIVE.—The Executive branch of the Government is administered by the Governor and the Ministry. The Governor is the representative of the Queen, from whom he receives his appointment, and it is in his name that all the public acts of the Executive Government are performed. The Ministers appointed by the Governor are his responsible advisers, without whose concurrence or recommendation he has

little real power to act. Should any of the public acts of the Governor be of a questionable kind, the Ministers are liable to be called to account by the Assembly and it is for this, among other reasons, that they are called "responsible." At present there are seven Ministers who are respectively entitled the Colonial Secretary, the Treasurer and Secretary for Finance and Trade, the Secretary for Lands, the Secretary for Public Works, the Postmaster-General, the Attorney-General, and the Solicitor-General. These officers are charged with the performance of all the business of the country, and are responsible for the supervision and control of the various subordinate departments. For example, the Colonial Secretary transacts all business connected with naval and military matters, foreign correspondence, the administration of justice, law and police registration, ecclesiastical establishments, public education, and other matters of internal arrangement. The Treasurer is charged with the business connected with the financial affairs of the colony, including the questions of taxation, collection of revenue, the public debt, trade and commerce, the Government Printing Office and navigation. The management of the Public Land including those occupied for mining purposes, is confided to the Secretary for Lands. The construction of roads, railways, and bridges; the improvement of river navigation, ports and harbours, formation of docks and wharfs; and the erection of public buildings and works of defence, belong to the Department of the

Secretary for Public Works. To the Postmaster-General is confided the business connected with the conveyance of mails, the management of post offices, the Money Order office, and the Electric Telegraph. The departments entrusted to the Attorney-General and Solicitor-General are:—The Crown Law Office, the Supreme Court, the Insolvent Court, District Courts, Courts of Quarter and Petty Sessions, the Coroners' Courts, and the matters appertaining to the Office of Sheriff: in short, everything that relates to the administration of justice in the colony.

95. ADMINISTRATION OF JUSTICE.—For the administration of Justice, there have been established a Supreme Court, District Courts, Courts of Quarter Sessions, and Courts of Petty Sessions. For the first-named, there are four Judges, who try suits in Sydney, and visit the country districts periodically to hold Assize or Circuit Courts. The places at which such courts are held are, Albury, Armidale, Bathurst, Deniliquin, Goulburn, Maitland, Tamworth, and Wagga Wagga. Litigants have, within certain limits, the right of appeal from the Judge's decision to the Privy Council of England. There are six District Court Judges who hold courts for the trial of less important cases, in nearly all the more important towns in the colony. The same Judges, assisted by the local Magistracy, hold the Courts of Quarter Sessions for the trial of criminal cases in all the principal country towns.

The Courts of Petty Sessions for the trial of light offences, are held by the local magistrates in about a hundred localities.

96. REVENUE.—The public revenue of the colony amounts to about £2,250,000 per annum. It is derived chiefly from the sale and rent of the public lands, and from customs' duties, from gold duties, licenses, postage, railway and telegraphic receipts. The ordinary expenditure reaches to about the same amount per annum, though a large additional sum is expended in the construction of railways and other public works. This additional expenditure is defrayed from the proceeds of loans which remain as a public debt, amounting at present to about £10,000,000.

97. RELIGION.—The religious denominations of the colonists are various. There is no dominant religion, and no one denomination specially supported by the State. The professors of all forms of religious belief, therefore, possess equal civil rights, and enjoy perfect toleration and freedom. The principal religious bodies, judging from the number of their adherents, are, the Church of England, the Church of Rome, the Presbyterian Church, and the Wesleyan Methodist Church; but there are numerous others, some of them possessing considerable influence. The Church of England is under the care of five bishops whose dioceses are named from Sydney, Newcastle, Grafton and Armidale, Goul-

burn, and Bathurst respectively. The Roman Catholic Church includes the same number of dioceses, named from Sydney, Maitland, Bathurst, Goulburn, and Armidale. By the Presbyterian body, the members are distributed among seven Presbyteries entitled respectively the Presbyteries of Sydney, the Hawkesbury, the Hunter, New England, Bathurst, Goulburn, and Illawarra. In like manner the colony is divided by the Wesleyans into the Sydney, Bathurst, Goulburn, and Maitland Districts.

98. EDUCATION.—The public means of education in the colony are—the Primary Schools, the Grammar School, and the University with its Affiliated Colleges. The Public Primary Schools of the colony are, by law, placed under the jurisdiction of the Council of Education. Four kinds of schools are recognised—Public Schools, Certified Denominational Schools, Provisional Schools, and Half Time Schools. The two first-mentioned differ chiefly in the provision made for religious instruction; but in both, the same course of secular instruction, including all the usual school subjects, is followed. This is also the case with the other classes of schools. Primary Schools are now spread all over the colony from the Tweed River on the North to Twofold Bay on the south; and from the shore of the Pacific to the River Darling. The instruction given in Primary Schools is intended to comprise the elements of what is called an *English* education. The next grade of

instruction is supplied by the Sydney Grammar School, founded and supported by the State, chiefly with a view to the teaching of classics and mathematics preparatory to the University course. Six scholarships at the Grammar School, averaging £20 in yearly value, are open to competition by all persons below the age of twelve years. The University is governed by a Senate, at the head of which is a Chancellor. There are Professors of Classics, Mathematics, and Physics, and Readers in Law and French. Scholarships in the University of the annual value of £50 each, are awarded to successful competitors in the examinations. Eight of these scholarships have been provided by the Senate from the public endowment, and three others have been instituted by private persons. Of the Affiliated Colleges, only two have as yet been established,—St. Paul's for members of the Church of England, and St. John's for Roman Catholics. In addition to the public provision for education, there are numerous private schools of various grades for both elementary and superior instruction.

CHAPTER XI.

TOPOGRAPHY.

99. TERRITORIAL DIVISIONS.—New South Wales, so far as surveyed, is divided into *counties*, of which about one hundred and twenty have been named. Except for purposes connected with the survey of land, the division into counties is at present of little practical value. Nineteen of these counties formed what were formerly known as the Old Settled Districts. Taking Sydney in the county of Cumberland as the starting point, and proceeding northward, we find the counties of Northumberland and Gloucester in successive order on the coast; southward from Cumberland are Camden and St. Vincent. Westward from these coast counties, commencing from the north, are Durham, Brisbane, Hunter, Phillip, Bligh, Cook, Westmoreland, Roxburgh, Bathurst, Wellington, Georgiana, Argyle, King, and Murray. Other counties in the Coast District to the northward of Gloucester are Macquarie, Dudley, Raleigh, Fitzroy, Clarence, Richmond, and Rous, the last mentioned being on the borders of Queensland. Southward from St. Vincent are Dampier and Auckland. On the northern tableland are Buller, Drake, Gough, Gresham, Clarke, Hardinge,

Sandon, Inglis, Vernon, Hawes. On the southern tableland are Buccleuch, Cowley, Selwyn, Beresford, Wallace, and Wellesley. On the western slope of the northern tableland are Burnett, Murchison, Darling, Parry, Pottinger, and Buckland. On the western slope of the southern tableland are Ashburnham, Monteagle, and Harden. Commencing on the north, on the great plains, we find Arrawatta, Stapylton, and Benarba on the left bank of the Macintyre River, and Courallie on the left bank of the Gwydir. Nandewar, Jameson, and Denham are on the right bank, and White and Baradine on the left bank of the Namoi. Napier, Gowen, and Leichardt are on the right bank of the Castlereagh. On the right bank of the Macquarie are Lincoln and Ewenmar, Narromine and Oxley on the left; Gregory extends to both sides of the river. Two counties Kennedy and Flinders have been named on the left bank of the Bogan. Following down the right bank of the Lachlan we find in succession Cunningham, Blaxland, Franklin, and Waljeers; on the left bank, Forbes, Gipps, Dowling, and Nicholson. Between the Lachlan and Murrumbidgee, is the county of Bland, and on the right bank of the latter river are Clarendon, Bourke, Cooper, and Sturt; on the left bank, Wynyard, Mitchell and Boyd—Waradgery and Caira occupying territory on both banks. On the north side of the Murray lie Goulburn, Hume, Urana, Denison, Townsend, Cadell, Wakool, Taila, Wentworth, and Tara. Ascending the Darling River, we find on

the left bank Perry and Livingstone; on the right bank, Windeyer and Menindee.

The whole colony, with the exception of the nineteen counties first mentioned, is divided into thirteen Pastoral Districts, named respectively Gwydir, New England, Clarence, Macleay, Liverpool Plains, Bligh, Wellington, Warrego, Albert, Darling, Lachlan, Murrumbidgee, and Monaro. These are placed under the charge of Commissioners of Crown Lands.

The Police Districts are divisions of the territory made for the convenience of police administration and the collection of statistics. They are seventy-one in number, but are liable to alteration, and are consequently of little value in a geographical point of view. The sixty Electoral Districts have to some extent been based upon the Police Districts.

It is necessary to observe that, of the numerous towns springing up in all directions throughout the colony, a large number are of recent formation, and are, so to speak, yet in their infancy. Few of them are, therefore, of much present importance, and they afford little material for remark or description.

100. TOWNS IN THE COAST DISTRICT.

Richmond River District.

Casino.—Casino is a postal township, situated on the main stream of the Richmond River, in the centre

of a fine pastoral and agricultural country. Population, 284.

Lismore, on the north arm of the same river, carries on a considerable trade in timber, large quantities of which are exported from the district. Population about 250.

Coraki, at the junction of the two principal branches of the river, appears likely to become a place of importance, being well situated for trading purposes.

Ballina, at the mouth of the Richmond, is likely to become a flourishing seaport town.

Clarence River District.

GRAFTON, at the head of the navigation of the Clarence, is the capital of a magnificent agricultural and pastoral district. It is divided by the river into North and South Grafton. Grafton is a borough, municipal affairs being administered by a mayor and aldermen. Being the seat of a Bishop of the Church of England, it is also called a city. It is a place of considerable trade which is principally carried on with Sydney or Melbourne. The means of communication are ample, there being, in addition to sailing craft, the vessels of two Steam Navigation Companies. The exports consist of the agricultural and pastoral products of the district and some manufactured goods, the chief

of which are preserved and salted meats, extract of meat, tallow, wine, sugar, and molasses. In addition to these gold and antimony, the produce of the district, have been exported to a limited extent. Soap, candles, and leather are also manufactured at Grafton. Population, 2250.

Other centres of population in this district are

Copmanhurst, a postal village about twenty miles from Grafton and near the Meat Preserving Establishment at Ramornie.

Nymboida, a hamlet twenty four miles south-west from Grafton on the Nymboi River.

Ulmarra, a postal township about nine miles from Grafton, in the midst of a fertile agricultural district.

Brushgrove, a village on Woodford Island.

Lawrence, a postal township situated on the north arm of the Clarence, opposite to Woodford Island.

Macleay, a village at the junction of the north and south arms of the Clarence. Population, 139.

Macleay River District.

Kempsey, the most important place in the district of the Macleay River, has a population of 865 persons, including the eastern and western divisions. Consider-

able trade is carried on in agricultural produce, which is exported to Sydney.

Fredericton is a small postal village lower down the river. Population, 188.

Hastings River District.

Port Macquarie, a seaport town situated at the mouth of the Hastings River. Like most of the harbours on the coast formed by the estuaries of rivers, that of Port Macquarie is obstructed by a bar which greatly interferes with its convenience for purposes of trade. The town and neighbourhood are remarkable for their genial climate and salubrity which render them suitable places of resort for invalids, especially persons suffering from certain forms of consumption. Population, 691.

Manning River District.

Wingham is the official capital of the district. It has a population of 102 persons.

Tinonee, on the south bank of the river, is a postal township with a population of 148 persons.

Taree, on the north bank and nearly opposite to Tinonee, is at the head of the navigation and seems likely to become the most important place in the district. Population, 339.

Cundletown, on the left bank of the river, has a population of 121.

County of Gloucester.

Stroud, on a tributary of the Karuah River, is a postal town, with a population of 289 persons. It was long the head quarters of the Australian Agricultural Company which possesses an extensive tract of land in the vicinity.

Bulladeelah is a small village near the Myall River.

Hunter River District.

NEWCASTLE is the second seaport in point of importance in the colony. At this place the Hunter expands into a broad estuary, forming a very secure harbour which has been improved by artificial means. Suitable wharfs have also been constructed to accommodate the trade of the locality. From its position at the entrance to the river, and its proximity to the most active coal-mining district in the colony, Newcastle is a place of great trade. Steamers of considerable power and tonnage ply daily between this port and Sydney, and as many as 1046 vessels, with an aggregate stowage of 383,242 tons, left the port in the year 1870. The great article of trade is coal, of which about 300,000 tons are annually exported from the colony, or conveyed to Sydney; but the agricultural products of

the neighbouring district, and the wool and tallow of the north-western interior, are also shipped here in large quantities. Newcastle possesses a lighthouse at the entrance of the harbour, and gives its name to a bishop's see in connection with the Church of England. It returns one member to the Legislative Assembly. Population, 7581.

Murrurundi.—Following the course of the River Hunter from its sources in the Liverpool Range, the first village at which we arrive is Murrurundi, situated on the River Page, at the foot of the mountains. It is the present terminus of the Great Northern Railway. Population, 311.

Haydon Town is a village adjacent to Murrurundi, and has a population of 257.

Scone, on another tributary—Dartbrook—has a population of 574. The Great Northern Railway has a station at this town.

Aberdeen—About seven miles south of Scone is the village of Aberdeen, on the right bank of the Hunter River. There is a railway station at Aberdeen.

Muswellbrook, on the left bank of the Hunter, is a town and municipality, with a population of 1445. It has a railway station.

Merriwa, situated on a tributary of the Goulburn River, has a population of 287.

Cassilis.—This is a postal township on the Murrumbidgee Brook, in the centre of a fine pastoral district. Population, 141.

Wollombi, on the brook of the same name, is a village forming the local centre of population and trade of an agricultural district. Population, 222.

Fordwich.—A small village on the Wollombi Brook. Population, 117.

Singleton is the local capital of an extensive agricultural district, and is also an important point on the Great Northern Railway. It is situated on the right bank of the Hunter, which is here a considerable stream. Population, 1187.

Jerry's Plains.—The village so called is situated on the Hunter River, above Singleton, in an agricultural and pastoral district. Population, 150.

Darlington, a village about a mile from Singleton, and separated from it by the Hunter River, has a population of 153.

WEST MAITLAND is the most important inland town in this district. The town is built in an irregular manner on the alluvial flat through which the Hunter flows on its winding course. Being but slightly elevated above the bed of the river, West Maitland is liable to inundation; and it has more than once

happened, that the floods have risen thirty feet above high-water mark, covering the whole of the township. Notwithstanding this and some other serious disadvantages, the town continues to flourish, and has become a place of great trade, especially with the northern and western interior. The Great Northern Railway passes through the town, in which there is an important station. In addition to places of worship, West Maitland possesses a Hospital, and a School of Arts. It returns a member to the Colonial Parliament. Population, 5079.

Maitland.—Adjoining West Maitland, but separated from it by Wallis' Creek, and on the same bank of the river though lower down the stream, is Maitland, or as it is popularly called, East Maitland. Though, for the most part secure from floods, it is not so populous as West Maitland, and does not possess the same commercial advantages. There is a railway station in the town. The principal public building is a large gaol. Population, 1675.

Branxton.—This post town is situated about midway between West Maitland and Singleton. The Great Northern Railway passes near it. Population, 254.

Lochinvar.—This is a village about seven miles north-west of West Maitland, and is the centre of an agricultural and wine-producing district. The Great

Northern Railway passes near the village. Population, 320.

Bishop's Bridge.—This is a small village, distant six miles from West Maitland, on the road to Wollombi. Population, 116.

Morpeth, the head of the navigation of the Hunter, is the station from which the steamers ply which run between Sydney and the Hunter District. Coal is abundant in the vicinity, and there is a large extent of agricultural land contiguous to the town. Population, 1236.

Hinton, at the junction of the Hunter and the Paterson, is the centre of an agricultural district. Population, 340.

Paterson, on the river of that name, is a village of some local importance. Population, 288.

Largs, lower down the river, has a population of 172 persons.

Dungog is the chief town in the upper portion of the valley of the Williams River, and is surrounded by a fine agricultural district. Population, 396.

Clarence Town, lower down the stream, is at the head of the navigation of the Williams River. Population, 350.

Raymond Terrace is situated at the junction of the Hunter and the Williams. Population, 535.

Hexham, on the right bank of the Hunter, about ten miles from Newcastle, is situated in a mining and agricultural district. It possesses a railway station, the Great Northern Railway passing through the village. Population, 143.

Stockton, at the mouth of the Hunter, opposite to Newcastle, to which it may be regarded as a suburb, has a population of 341.

Brisbane Water District.

Gosford is the only place of note in this locality. It has a population of 168.

County of Cumberland.

SYDNEY, the capital of New South Wales, is situated on the southern shore of Port Jackson, about four miles from the entrance. The principal portion of the city occupies two elevated and parallel ridges and the intervening valley, and is nearly enclosed by the waters of the harbour; but besides this peninsular part, an extensive additional tract is included within the boundaries. The whole area of the city is about 2000 acres; and it contains 115 miles of streets, besides minor thoroughfares. The principal streets of Sydney run from north to south, being crossed by

others at right angles. They are named from the members of the Royal Family and of the Cabinet of the period when the city was laid out. George-street preserves the name of the sovereign; Sussex, Kent, Clarence, York, Cumberland, and Gloucester-streets, those of the royal dukes; and Castlereagh, Pitt, Bathurst, and Liverpool-streets, those of ministers. The more modern portions of the city are named after no particular system. In general, the streets, though somewhat narrow, are well formed and paved, and lighted with gas.

Owing to its peculiar position the appearance of the city from the harbour is very fine. The more modern parts of the town are well built, there being abundance of excellent building stone available in the immediate vicinity; but the older parts are irregular and somewhat mean and unsightly. Great improvements have been effected in this respect of late years, and some of the public buildings, banks, and shops vie in architectural beauty and excellence of construction with similar erections in European countries. Among the public buildings, the more prominent are—Government House, the residence of the Governor; Public Offices; Churches, of which St. Andrew's and St. Mary's Cathedrals, and St. George's Church, are the most conspicuous for architectural excellence; Banks, to which may be added the Exchange; Scientific and Educational Institutions, the Observatory, Museum, Free Public Library, School of Arts, Grammar School,

University, and Affiliated Colleges; and Charitable Institutions such as the Infirmary.

Sydney derives some of its importance from the fact that it is the seat of government, and the place of meeting for the Legislative Chambers. Here also are the Superior Law Courts and the head-quarters of the Police administration.

The trade of Sydney, both foreign and inland, is very great, as nearly all the exports and imports of the colony pass through it. There are also some manufactures, such as machinery, woollens, leather, vehicles, and shipbuilding, in addition to the ordinary domestic manufactures—soap, candles, dyeing, &c. For the convenience of ships requiring repairs, there are two Patent Slips and two Dry Docks, capable of receiving vessels of large tonnage.

Among the points of interest not previously noted, are the Botanic Gardens, the Domain, and Hyde Park, places for public instruction and recreation.

The population of Sydney is 76,159, and of the adjacent suburbs, 60,324; together, 136,483.

Parramatta, situated at the head of a prolongation of Port Jackson, which is named the Parramatta River, is the second town of the colony in point of population. It was founded shortly after the original settlement at Sydney. Several public establishments are located in Parramatta, as Orphan Schools, (Protestant and Catholic,) Hospital, Lunatic Asylum, and Gaol. It

returns two members of the Assembly. The surrounding district is noted for its production of fruit, especially oranges. Population, 6103.

Smithfield.—This village lies about five miles to the south-west of Parramatta. Population, 264.

Ryde, on the left bank of the Parramatta River, is the centre of a large fruit-growing district. Population, 1461.

Liverpool, situated on George's River, was formerly of some importance, but has declined of late years. The Southern Railway passes through the town, which contains a Hospital and a Benevolent Asylum. Population, 1338.

Campbelltown.—Following the Southern Railway at a distance of twelve miles from Liverpool, we arrive at Campbelltown which has a population of 592. The adjacent district is agricultural.

Appin.—A small village, about ten miles from Campbelltown on the road to Wollongong and the coast. Population, 179.

St. Mary's, on the Western Road, is about fifteen miles to the westward of Parramatta. Population, 422.

Penrith.—Below the junction of the Wollondilly and Nepean, where the united streams receive the latter

appellation, is Penrith, a place of some local importance. It is connected with Sydney by the Great Western Railway. Population, 836.

Emu.—Opposite to Penrith, on the left bank of the Nepean, in the county of Cook. Population, 136.

Richmond, a pretty village lower down the stream where it assumes the name of Hawkesbury, is the terminus of a branch from the Great Western Railway, commencing at Blacktown. Population, 1065.

Enfield, (or North Richmond) is situated on the left bank of the Hawkesbury, opposite to Richmond, in the county of Cook. The surrounding district is known as the Kurrajong, and is remarkable for its salubrity and picturesque scenery. Population of the village, 231.

Windsor, a considerable country town, is situated in the midst of a fine agricultural district which, however, is unfortunately subject to devastating floods. The Hawkesbury River which flows past the town, is navigable as far as Windsor for vessels of moderate tonnage. Population, 1732.

Wilberforce, about four miles distant, has a population of 375.

Pitt Town, which lies at about the same distance from Windsor, has a population of 241.

County of Camden.

Camden, the centre of a fine agricultural district, is situated on the banks of the Nepean (or Cowpasture) River. Population, 604.

Wilton, a postal village on the bank of the Nepean River, has a population of 121.

Picton.—This town is situated about 52 miles from Sydney on the Great Southern Railway. The surrounding district is agricultural. Population, 337.

Upper Picton, a village lying about a mile from the foregoing, has a population of 115.

In the Illawarra District the principal towns are—

Wollongong, in the neighbourhood of which coal-mining is extensively carried on. This occupation and that of dairying supply two of the staple exports of the district—coal and butter. Population of the municipality, 1397.

Kiama is beautifully situated farther to the south. The neighbourhood is fertile and picturesque. Dairy produce is raised in large quantities. Population of town, 741.

Shoalhaven District.

Numba.—This is a municipality near the mouth of the Shoalhaven River, in a fine agricultural district. Population, 646.

Terrara, further up the stream, is a village with a population of 218.

Nowra.—A postal village about two miles above *Terrara*. Population, 243.

SOUTHERN COAST DISTRICT.

Ulladulla, about fifty miles south of the Shoalhaven, is a small sea-port town with a small, but safe harbour. The neighbouring district is well adapted for dairy farming. Population, 129.

Nelligen is a small sea-port town at the mouth of the Clyde River. It is the outlet for the produce of the neighbourhood, and even for the mining districts near Braidwood.

Moruya, on the river of the same name, is the capital of an agricultural and mineral district, silver being one of the special products of the locality. Population, 547.

Bega.—This town is the centre of a fine agricultural and pastoral district. It has a population of 516 persons.

Merimbula, a village at the entrance of the Merimbula Lake, is the shipping port of the surrounding district. It has a manufactory of Maizena—a preparation of Indian corn. Population, 115.

Panbula, about twelve miles to the westward of the foregoing, has a population of 293.

Eden.—This sea-port town is situated on the north side of Twofold Bay, one of the finest natural harbours in Australia. Population, 214.

Candelo.—A small village about twelve miles from Bega. Population, 118.

101.—TOWNS ON THE TABLE LANDS.—NORTH TABLE LAND.

ARMIDALE.—The most important town in this portion of the colony, and the capital of the Northern District generally, is Armidale. It is situated on one of the head waters of the Macleay River, and at an elevation of 3278 feet above the level of the sea. The climate is consequently cold as compared with that of the Coast Districts. Proximity to the Northern Gold Fields, and to extensive tracts of good agricultural land, will probably make Armidale a place of some importance in future. Population, 1369.

Tenterfield is a rising town near the northern boundary of the colony, and in the centre of an agricultural, pastoral, and mining district. Population, 911.

Glen Innes, on the Great Northern Road, midway between Armidale and Tenterfield, in the centre of a tin producing district. Population, 343.

Inverell, on the Macintyre River, is well situated as regards the quality of the land in the vicinity for agricultural purposes. The discovery of tin in the neighbourhood is likely to increase the prosperity of the town. Population, 509.

Bendemeer, on the Maluerindi River, at the point where it is crossed by the Great Northern Road, has a population of 110.

Bundarra, a village on the River Bundarra, a tributary of the Gwydir, has a population of 184.

Walcha is situated on the Apsley River, in a fine agricultural district. Population, 246.

SOUTHERN TABLE LAND.

GOULBURN, on the Mulwarree Creek, an affluent of the Wollondilly River, may be regarded as the capital of a very important district. It is beautifully situated on the edge of some extensive open downs, called the Goulburn Plains. It is a flourishing town, with a population of 4453.

Berrima, on the Wingecarribbee River, a tributary of the Wollondilly, was a place of considerable note in former times, but is now of less importance. It contains an extensive gaol. Population, 475.

Braidwood, on a tributary of the Shoalhaven River,

is the centre of an important mining, agricultural, and pastoral district. From its elevation above the sea level—2550 feet—the climate of this place is cold compared with that of most parts of the colony. Having direct communication with Nelligen, a port on the east coast, and being situated on the high road from the Monaro district, Braidwood will, probably, become a place of importance. Population, 1197.

BATHURST is an important town, and capital of the Western District of the colony. It stands on a gentle slope on the left bank of the Macquarie, which is here crossed by a fine bridge. It is surrounded by the celebrated Bathurst Plains (or Downs), consisting of a large extent of naturally clear land of an undulating character. The streets are well laid out, and the houses have not so much of the straggling appearance common to country towns. Being at an elevation of 2300 feet above the sea, the climate is cooler than that of the Coast District, and is considered to be highly salubrious. Population, 5030.

Sofala, on the Turon River, a tributary joining the Macquarie on the right bank, is the capital of an extensive gold-mining district, and was formerly a place of considerable importance. With the decline of the Turon Gold Field, Sofala has greatly decayed. Population, 644.

Orange, situated some distance from the left bank of

the Macquarie, is a rising town in the centre of a fine agricultural and mining district. Population, 1456.

Mudgee is an important town, situated on the Cudgegong River, which flows into the Macquarie on the right bank. Mudgee is surrounded by mining, pastoral, and agricultural districts, and is a place of considerable trade. Population, 1786.

Wellington, at the junction of the Bell River with the Macquarie, is an old settlement, in a fertile and beautiful district. Population (including Montefiores, on the opposite side of the Macquarie), 549.

Dubbo, lower down the Macquarie and on the right bank, is a thriving town in the centre of a pastoral district. Population, 836.

In the basin of the Lachlan are—

Gunning, a small village near the head waters of the river. Its chief importance is derived from the fact that it is situated on the Great Southern Road. Population, 272.

Tuena, on the Abercrombie, in a gold-mining district. Population, 253.

Boorowa, on the river of the same name. Population, 446.

Carcoar, on the Belubula River. Population, 395.

Young, on the Burrangong Creek. Population, 792.

Cowra, on the right bank of the Lachlan. Population, 265.

Forbes, in the centre of the Lachlan Gold Fields. Population, 710.

Grenfell, in the same district. Population, 1657.

In the basin of the Murrumbidgee are—

Yass, a thriving town on the River Yass—which flows into the Murrumbidgee on the right bank. Population, 1167.

Binalong. Population, 189.

Queanbeyan, on the river bearing the same name. Population, 682.

Bungendore, in the basin of Lake George. Population, 197.

Cooma, on a small tributary of the Murrumbidgee, is regarded as the capital of the Monaro District. Population, 492.

Jugiong, a village on the right bank of the Murrumbidgee. Population, 247.

Gundagai, on the right bank of the Murrumbidgee. The former township was destroyed by a flood in the river, in the year 1852, when about seventy lives were lost. Population, 785.

Tumut, on the Tumut River, in a fine, agricultural, and gold-mining district. Population, 555.

Adelong, on the Adelong Creek, in a gold-producing district, noted for its quartz reefs. Population, 864.

In the basin of the Snowy River is—

Bombala, on the river bearing that name, an important town. Population, 565.

102. TOWNS IN THE INTERIOR PLAINS.—The towns on the great plains are neither numerous, nor, with few exceptions, important. They consist, for the most part, of a store or two, an inn, and the residences of a few mechanics, of whom a blacksmith is commonly one. These villages are supported either by the expenditure of persons travelling, or of residents in the surrounding districts who have engaged in pastoral pursuits. The following are the most worthy of note :—

Warialda, situated on a small creek running into the Gwydir River. Population, 131.

Tamworth, on the Peel River, is a considerable town, deriving its importance from its position on the Great Northern Road, its proximity to the gold-diggings on the banks of the Peel and its affluents, and its vicinity to a large tract of rich pastoral country. Population, 1511.

Gunnedah, a village situated on the Namoi River, near its junction with the Mooki. Population, 459.

Mundoran, a small village on the Castlereagh River.

Coonamble, on the same river, but lower down. Population, 209.

Booligal, on the Lachlan River. Population, 120.

Wagga Wagga consists of two parts, lying on the north and south banks of the Murrumbidgee. It is a place of considerable importance. Population, 1858.

Hay, at Lang's Crossing Place on the Murrumbidgee. Population, 664.

Balranald, near the junction of the Murrumbidgee and Murray. Population, 233.

In the basin of the River Murray are—

ALBURY, an important town on the Upper Murray. The land in the neighbourhood is well adapted for cultivation, and is especially suitable to the growth of the vine. Large quantities of wine are annually produced in the surrounding district, and this article promises in time to become one of the staple exports of that portion of the colony. The high road from Sydney to Melbourne passes through Albury, and crosses the Murray at this point by a handsome bridge.

In the vicinity of Albury are several villages, and the whole district is gradually rising in population and importance. Population (of the township), 1906 ; the whole municipality, 2592.

Deniliquin, situated on the Wakool River, an arm of the Murray. It is a great *entrepôt* for the sale of cattle and sheep, and is the centre of an extensive pastoral district, being surrounded by vast level plains. Population, 1118.

Moama, on the Murray, is a noted crossing place. Population, 281.

Wentworth, at the junction of the Darling and the Murray. Population, 445.

In the basin of the River Darling are—

Bourke, on the left bank of the Darling, the centre of a pastoral and mining district and a place of some trade. Population, 318.

Wilcannia, lower down the Darling and on the right bank, with a population of 264.

Menindie on the lower course of the river.

HISTORY OF NEW SOUTH WALES.

CHAPTER I.

FOUNDATION OF THE COLONY.

THE history of New South Wales, as the abode of a civilized community, begins on the 26th January, 1788. On that day, since commemorated yearly as the anniversary of the founding of the colony, the first European settlers landed on the shores of Port Jackson. The period at which the colony was established is one of the most important in modern history. A few years previously, the North American colonies had revolted against the authority of the Mother country, and after a long struggle, had succeeded in gaining their independence as the United States of America. British rule had been extended over a considerable portion of India, and the Company which then governed the country, had entered upon that career of conquest which resulted in the subjugation

of nearly the whole of the peninsula. More important still was the great revolution which, in the following year, burst forth in France, and which exerted a serious influence upon the peace of the world for a quarter of a century after.

The spot chosen as the site of the new settlement was that on which the city of Sydney now stands. It had originally been intended by the projectors of the enterprise, that the colony should be located at Botany Bay, but this design was abandoned by the leader of the expedition on account of the unsuitableness of the land in the vicinity, and the defects of the bay as a harbour for shipping. Having, in his search for a situation better adapted to the purpose, examined the harbour of Port Jackson, the Governor selected a position about six miles from the Heads, abounding in wood and water. The place was named Sydney in honour of a nobleman of that name who, as Colonial Secretary at the time, had been officially concerned in the despatch of the expedition.

About a thousand persons, of whom one-third were women, had been brought from England to New South Wales in eleven ships, which were long spoken of, in familiar phrase, as the "first fleet." Nearly four-fifths of the number were prisoners exiled from their native land for various offences against the law. The remainder of the colonists were chiefly persons necessary to guard and govern the community. Cap

tain Arthur Phillip, of the Royal Navy, had been appointed Governor; and Major Ross, Lieutenant-Governor.

As soon as the colonists had landed, the necessary steps were taken for clearing the ground of timber, so as to admit of the formation of an encampment. In the evening British colours were hoisted on a flagstaff which had been set up on the spot now known as Dawes' Battery. Having thus taken formal possession of the country, the Governor and his officers drank the health of the King, George III., around the flagstaff, the people cheering and otherwise exhibiting much enthusiasm. Next day all entered upon the arduous duties inseparable from the formation of a new settlement. Besides felling the huge trees that covered the ground in all directions, it was necessary to land the stores from the ships, to construct dwellings and warehouses, and to erect hospital tents. These were urgently required on account of the sickness that prevailed among the people, and which was probably caused by the length of the voyage and the absence of proper food.

On the 7th February, all the colonists were assembled on a piece of ground that had been cleared for the purpose, and the proper officer read the King's commission, by which Captain Phillip was appointed Captain-General and Governor-in-Chief of New South Wales. The territory thus placed under his jurisdic-

tion extended from Cape York to South Cape, in Tasmania—then supposed to be a portion of the mainland—and from the Pacific to the 135th degree of East longitude. This part of the ceremony having been concluded, the Governor addressed to the officers and soldiers a few words of congratulation and encouragement. From the past success of the expedition he augured future prosperity for the colony, pointed out the material advantages of the country, impressed upon his hearers the duties they were called upon to perform, and urged upon them the necessity for discharging those duties with zeal and assiduity. The Governor further predicted, that the State, of which the foundation was that day laid, would, “ere many generations have passed away, become the centre of the Southern Hemisphere—the brightest gem of the Southern Ocean.” He concluded with the words—“Were it necessary to add anything to what I have already said to induce you to pursue that course which is influenced by duty, by patriotism, and by honour, I have only to say that the eyes of England are upon you, and that future generations, reviewing your history, will lavish praises, or pronounce disapprobation, according as you truly deserve.” Then, turning to the prisoners, the Governor earnestly advised them to be honest and orderly, to avoid all immorality, but to strive by industry and good conduct to recover their lost position in society. In this address he made use of all the promises calculated to encourage them to keep

in the right path, and of threats likely to deter them from wrong-doing, and concluded by assuring them of his desire to secure their welfare and happiness.

The construction of residences and other necessary buildings was proceeded with by the Governor with all possible speed, and steps were taken for cultivating the soil in order to supply the colonists with food. For this purpose also, a colony was formed at Norfolk Island which, from its fertile soil and genial climate, appeared capable of supplying a large population, while its remoteness and inaccessibility rendered it a fit place of confinement for persons whose conduct might deserve punishment. This settlement was placed in charge of Lieutenant King who, at first, had not more than twenty-five persons under his control.

The Governor next turned his attention to the exploration of the country round about Sydney, which was named the County of Cumberland. In one of the expeditions undertaken for this purpose, the Governor discovered the district in which the town of Parramatta now stands, and considering some of the land suitable for cultivation, he established a settlement at a spot which he named Rose Hill. On another occasion he discovered the river Hawkesbury—so named from a nobleman then holding office in the mother country—and traced it from Broken Bay upwards as far as the spot on which the town of Windsor was afterwards built. In his intercourse with the aborigines, Phillip was at all times humane

and considerate, endeavouring to win them by kind treatment, and even when wounded by them, he would not permit his men to retaliate, as the violence of the savage had evidently been caused by misunderstanding the Governor's intentions. Attempts at exploration by other persons proved fruitless as regards the discovery of land suited to agricultural purposes.

In 1791, the colony received an accession of about two thousand persons, brought by nine vessels which were long spoken of as the "second fleet." This increase of numbers however was under the circumstances of the colony, but a great addition to the difficulties under which it was labouring. By another vessel the Governor received a public seal, to be used on all public documents purporting to be in the King's name.

The history of the colony during the administration of Governor Phillip is a record of continual struggles against adverse circumstances. The pilfering habits of some of the settlers and attempts at escape on the part of others, caused much trouble. At Norfolk Island the prisoners entered into a conspiracy to seize a vessel and escape to Tahiti, but the plot was fortunately discovered before it could be carried into effect. The bad conduct of the settlers towards the blacks rendered the latter hostile, and led to numerous conflicts in which many lives were lost. But the greatest danger from which the infant colony suffered was famine. Soon after landing, the whole of the horned

cattle strayed away into the bush and were never recovered. The crops at Norfolk Island were destroyed by a hurricane which also injured the corn in the public stores. All hope of obtaining supplies from this source was therefore cut off. A stock of provisions, calculated to last for two years, had been brought to the colony by the first ships, but had been considerably damaged since it was landed; and in November, 1789, it was found necessary to reduce the allowance of food given to the people by one-third. Early next year, as no ship had arrived with provisions from England, and the stock on hand was rapidly diminishing, nearly three hundred persons were sent to Norfolk Island which was recovering from the effects of the tempest. The *Sirius*, as the vessel which carried them was named, was wrecked at Norfolk Island before the provisions could be landed. On receipt of the intelligence in Sydney, immediate steps were taken by the Governor to provide for the emergency. The allowance of provisions was still further reduced, and parties were organized for the purpose of augmenting the supply of food by hunting and fishing. A vessel was also despatched to Batavia for supplies, and as the ration issued to the settlers was scarcely sufficient to sustain life, they were partially released from the obligation to labour. Some even died of hunger. In these circumstances the arrival of a ship from England, after a voyage of ten months, was regarded as a most auspicious

cious event, until it was found that, while her passengers augmented the population, her stores added but little to the existing stock of provisions. This vessel brought intelligence of the despatch, some months previously, of a ship with provisions for two years, and of the subsequent loss of much of the cargo. Shortly after, another store-ship arrived, and the apprehensions of the colonists as to the supply of food seemed now to be effectually relieved. But their contentment was doomed to be of but short duration, inasmuch as, a few days after, a fleet of three transports reached Sydney with a large number of prisoners and soldiers. The news of the French Revolution was brought by these vessels.

About this time the fishery was unusually successful, and the colonists were supplied with a change of food. A portion was also bestowed upon the aborigines in the neighbourhood. The escape of some prisoners in an open boat was another incident that caused some excitement at the same period. Towards the end of the year the vessel sent to Batavia returned with a large stock of provisions. Further quarrels with the blacks and escapes of prisoners are also to be recorded.

Next year, the colonists again suffered from scarcity of provisions, sickness became rife, and deaths were frequent. The allowance of food was once more reduced to the smallest quantity capable of supporting life. Hunting and fishing were again had recourse to

with a view to procure suitable food for the sick and weak. Some relief was afforded by the arrival of a ship with rice and other provisions from Calcutta, and after another interval of depression, a further supply was brought by a vessel from England. Another vessel with stores arrived three months after, bringing at the same time more prisoners, soldiers, and immigrants. It now seemed as if the colony was secured against all further risk of starvation, especially as additional provisions were brought to the colony by an American vessel and by a ship from England.

At the end of 1792, Governor Phillip announced his intention of relinquishing his office and returning to England. He left Sydney, with the regrets of the people, on the 11th December of that year.

His successor was Major Grose who administered the affairs of the colony for two years as Lieutenant-Governor. Under his rule little progress was made in the settlement of the colony, or in exploring unknown parts of the territory. A small number of immigrants arrived early in the year, and shortly after two Spanish ships visited the colony, their officers being received with the utmost respect and cordiality.

Later in the year, scarcity began once more to prevail, but the Governor, nevertheless, despatched a ship-load of provisions to Vancouver who was then exploring the western coast of North America. Having become aware of the breaking out of the French Revolution, which seemed likely to lead to war between the

mother country and France, the Governor determined to send a vessel to Calcutta for supplies, and thus secure the people against the risk of perishing by famine. The probable difficulty of obtaining provisions from the mother country rendered this step one of necessity as well as of wisdom. An exploring expedition under Captain Paterson, sent in the month of September, to the Blue Mountains, westward of Sydney, achieved no more important result than the exploration of the Hawkesbury River to a distance of ten miles above the present town of Richmond.

At the beginning of 1794, settlers for the first time established themselves on the Hawkesbury River. In March, the colonists again suffered from famine, but were relieved by the opportune arrival of two ships—one from England, and the other from Calcutta. The war, which it was found had been declared against France, had rendered it necessary to delay the former vessel for a convoy. From India, intelligence was received of the non-arrival of the ship sent by the Governor for provisions in the previous year. The missing vessel, however, returned to the colony in June, having proceeded to Batavia instead of Calcutta in consequence of an attack by pirates. By this course the danger of capture by French privateers in the Bay of Bengal was avoided. By this vessel and others that arrived about the same time, an abundant supply of provisions was received, as well as some luxuries. Another expedition to the Blue Mountains, under

Hacking, failed, after penetrating about twenty miles further than any previous exploration.

Governor Grose determined to return to England, in December, and on his retirement from office was succeeded by Captain Paterson, as Lieutenant-Governor, whose short administration of eight months was not marked by any occurrence requiring special notice, though conflicts with the blacks were somewhat frequent.

In September, 1795, Captain Hunter, of the Royal Navy, arrived in the colony, and at once entered upon his duties. Having successfully passed through all the difficulties before enumerated, the colony could now be considered as fairly established, and capable of sustaining itself from its own resources.

CHAPTER II.

ADMINISTRATION OF GOVERNORS HUNTER, KING, AND BLIGH.

SHORTLY after Hunter's assumption of office, printing was for the first time practised in the colony. A herd of wild cattle, descendants of those which had strayed from the settlements, was discovered near the River Nepean. The distillation of spirit from grain being extensively carried on, the Governor concerted measures for putting a stop to that practice as well as the

sale of intoxicating liquors. A riot among the soldiers of the New South Wales regiment led to the adoption of means for securing more rigid discipline in that corps. In the same year (1796) two churches were completed—one at Sydney, and another at Parramatta. Subsequently a log prison was erected at Sydney, and the first windmill was ready for work early in 1797. In consequence of the evils resulting from the unrestricted liberty for all persons to move from one settlement to another, a system of passports was introduced. Without a “pass,” all wayfarers were liable to imprisonment for a month. The settlers having suffered greatly from the depredations of the blacks, resolved to punish the plunderers, and several were killed in a fight which was thus originated. Other outrages followed on the part of the blacks. The stock of horses, cattle, and sheep in the colony was largely increased by arrivals from the Cape of Good Hope. The wreck of a vessel to the southward of Sydney led to the discovery of coal in Illawarra, and a ~~known~~ accidental circumstance was the means of making known the existence of the Hunter River, so named from the Governor.

Frequent attempts to escape from the colony had been made by men who had been transported, and early in 1798 an organised plan was devised for this purpose by a large number of the prisoners. The Governor permitted a selected number to make the attempt which signally failed. In this year, the coast

south of Sydney was explored by Mr. Bass as far as the fortieth parallel of south latitude. An abortive attempt to rebel on the part of some of the prisoners at Parramatta occurred about this time. Trade began largely to increase, vessels arriving from India and other countries. The church first erected was burnt down.

Next year, Mr. Bass and Lieut. Flinders proved—what had previously been suspected—that Tasmania was an island, and explored its coasts. A flood in the Hawkesbury, following a drought, caused great destruction of property in that district. The effect produced by efforts to improve the breed of sheep became noticeable about this time. The coast north of Sydney, from Moreton Bay to Hervey Bay, was explored by Flinders.

In 1800, a custom-house was established and duty charged on imports. Unfounded reports of the existence of a conspiracy to rebel against the Government were rife in the colony. The Governor relinquished his office on 27th September, and left for England. He was succeeded next day by Captain King. The stock of food in the colony having greatly diminished, a vessel was despatched to Tahiti for supplies, and the deficiency was also partly remedied by importations from Norfolk Island. Next year, Flinders explored the whole southern coast of Australia from King George's Sound to Port Phillip; and in 1802, he surveyed the Great Barrier Reef and the Gulf of Carpen-

taria. The first settlement in Tasmania was formed in 1803, and was located on the banks of the River Derwent. In the same year a settlement was formed at Port Phillip by colonists from England sent out by the British Government ; but early in 1804 the infant colony was broken up, and the people removed to Tasmania. Other settlements were soon afterwards formed in that island. The first newspaper published in the colony was printed on 5th March, 1804. A rebellion which broke out in this year among the prisoners located near Parramatta, was quelled, after some bloodshed, through the prompt and energetic measures adopted by the Governor. The most noteworthy fact in the history of the year 1805 is the abandonment of the little colony at Norfolk Island, and the gradual removal of the people to New South Wales and Tasmania. In 1806, another great flood occurred in the Hawkesbury, causing great loss of property. Captain King retired from office on the 12th August, his successor, Captain Bligh, having previously arrived in the colony. Bligh's short administration was unfortunate. While honestly, perhaps, endeavouring to put down the prevailing traffic in ardent spirits, his measures appear to have been injudicious. After various disputes with a merchant and settler, Mr. John Macarthur, the Governor caused that gentleman to be apprehended and committed for trial on various charges. The six military officers composing the Court assembled to try Mr. Macarthur, sustained his objection to

the presence of the official who had committed him, and whom he considered to be a personal enemy. The Court broke up without coming to a decision, and, notwithstanding the Governor's peremptory order, the members declined to sit unless a new Judge-Advocate were appointed to preside over their deliberations. Mr. Macarthur was again apprehended, and the officers, fearing for their own safety, urged the commander of the regiment, Major Johnston, to place the Governor under arrest. The principal colonists supported the request, and Major Johnston forthwith proceeded with his troops to Government House and required Captain Bligh to resign his authority as Governor. This revolution was accomplished on the 26th January, 1808. Major Johnston administered the affairs of the colony from that time until the end of July, when Lieutenant-Colonel Foveaux, who had been appointed Lieutenant-Governor, arrived in the colony. The agitation caused by these proceedings did not subside for some time, but continued during the earlier part of the administration of Colonel Paterson who assumed the office of Lieutenant-Governor at the commencement of 1809. This agitation was kept up partly by Bligh's failure to carry out his solemn promise to return to England. Desolating floods occurred during the year, at the end of which Colonel Paterson was superseded by Major-General Macquarie, the newly-appointed Governor.

CHAPTER III.

ADMINISTRATION OF GOVERNORS MACQUARIE AND
BRISBANE.

HAVING reinstated Bligh and the officers who had been displaced at the time he was deposed, Macquarie, after the lapse of twenty-four hours, resumed his duties as Governor. His first efforts were directed to the allaying of the agitation caused by Bligh's arrest, and in this he was entirely successful. He then entered upon the task of organizing the public departments, instituted a Civil Court of Justice, made regulations respecting the due observance of the Sabbath, and established a police for the town of Sydney. Roads to the country were improved, and townships laid out at Windsor, Richmond, and neighbouring localities.

In 1811, occurred a great drought, as well as another flood in the Hawkesbury. The Governor visited the settlements in Tasmania, and subsequently the harbours at Port Stephens and Newcastle.

In May, 1813, Messrs. Wentworth, Lawson, and Blaxland discovered a passage across the Blue Mountains, and for the first time threw open the great western interior to the enterprise of the colonists. In the month of November following, Evans, a surveyor,

led another expedition which, passing over the track already explored, reached the open country now called Bathurst Plains, and discovered the Macquarie River. The Lachlan was also found out in this year.

Next year, the country about Berrima was opened out by Mr. Hume and others. A road was constructed between Sydney and Liverpool. A sanguinary contest with the blacks was maintained for several weeks. Another abortive attempt at escape, on the part of some prisoners, occurred in this year. But the most important event was the publication of a Charter of Justice by which Courts of Justice were established, including a Supreme Court.

A road having been formed across the Blue Mountains, a new settlement was formed by the Governor at Bathurst in 1815. The country about the Lachlan River was further explored. While the colony was generally prosperous, some disturbance was caused by another outbreak on the part of the aboriginal inhabitants of the Nepean district and other places outside the settlements, in which many whites were killed, and which was not put down until a detachment of military had been sent out for the purpose. In the same year (1816), the foundation of the lighthouse at South Head was laid, and the Bank of New South Wales was instituted.

Next year, the country about Lake George was discovered and opened up for settlement. The Surveyor-General Oxley explored the Lachlan for some hundreds

of miles, and subsequently the Macquarie. Both these he found to expand into extensive marshes, which he believed to be the margin of a vast inland sea. From the Macquarie he proceeded to the Castlereagh, crossed the Arbuthnot (now Warrumbungle) Range, traversed the Liverpool Plains, and discovered the Liverpool Range to the south, and the Hardwicke (or Nundewar) Range to the north of his course. Still proceeding eastward, he ascended the northern table-land, discovered the Apsley River and Falls, and descending the Hastings River to the sea, named the harbour into which it discharges its waters, Port Macquarie. These explorations were not completed till late in 1818. In 1819, the New South Wales Savings' Bank was established. A Royal Commissioner, appointed to inquire into the working of the transportation system, arrived in the colony and reported unfavourably. The measures adopted by Macquarie for the benefit of the colony were in some instances censured, but the colonists generally supported the views of the Governor. About this time the value of colonial wool began to be recognised in England. On 1st December, 1821, Macquarie retired from office in favour of Major-General Brisbane who had been appointed Governor-in-Chief, and left for Europe in the month of February following. During his administration, the colony had made rapid strides in advance, both in a moral and material point of view.

In the same year, 1822, two gold medals were

awarded by the Society of Arts in England to Mr. John Macarthur for wool shorn from merino sheep imported by him, and special advantages were afforded by law to the wool-growers of the colony.

A new settlement was formed at Wellington Valley, in 1823, and a road over the Blue Mountains from Richmond to Bathurst was discovered.

Next year, the blacks in the Bathurst district proved very troublesome. A settlement was formed on Melville Island, on the north coast of Australia, and another at Moreton Bay. A Legislative Council was appointed, the members of which were, with one exception, officers of the Government. Messrs. Wentworth and Wardell having been admitted barristers of the Supreme Court, moved that the solicitors who had hitherto practised at the bar should now be restricted to the exercise of their proper department of the law. Although the motion was not carried, it prepared the way for the separation of the two branches of legal practice. A most important event in this year was the exploration of the present colony of Victoria by Messrs. Hovell and Hume who travelled overland from Lake George to Port Phillip, discovering in their route the Murrumbidgee, the Muniong Range, the River Murray, the Ovens, and other rivers, besides opening up much fertile and valuable country. Towards the end of the year, the public press was freed from the restrictions hitherto placed upon it, and trial by jury was introduced. The first jury was empan-

elled on the 2nd November, 1824. This, in the following year, led to some bitterness of feeling between those persons who had regained their freedom in the colony and the free class, which included all connected with the Government. Nevertheless, the experiment was deemed successful, and it was recommended that the jury system should be applied to the Supreme Court as well as to the Sessions. In the western district the outrages of bushrangers became so serious that a military force was sent from Sydney to restore order and security.

Governor Brisbane relinquished office on 1st December, 1825, and left the colony generally regretted.

CHAPTER IV.

ADMINISTRATION OF GOVERNORS DARLING AND BOURKE.

LIEUTENANT-GENERAL DARLING assumed the government on 19th December, 1825, having previously landed in Tasmania and proclaimed the independence of that colony which henceforward possessed an administration of its own. A new Legislative Council was appointed by the Governor for New South Wales soon after his arrival in Sydney. A meeting having

been called early in the ensuing year to congratulate Darling on his entrance upon his duties, Wentworth took occasion to impress upon those present the necessity for a Legislative Assembly elected by the colonists to frame laws for their government. This was the first public step towards the introduction of constitutional government into the colony. A settlement was formed in the Illawarra district, and a mail service was, for the first time, instituted in the colony. New Zealand was first colonized in this year by settlers from England, who however were to be protected by the Government of New South Wales. A severe punishment inflicted upon two soldiers and the speedy death of one of them in consequence, rendered Darling personally unpopular, and caused much trouble during his administration.

In 1827, means were taken to supply Sydney with water from the Botany swamps. The unpopularity of the Governor was further increased by the prosecution of Dr. Wardell for libel on account of some remarks made upon his administration. A new settlement was formed at Western Port. Disputes again arose between the Governor and influential colonists, and a fresh prosecution for libel was instituted against Dr. Wardell. A public meeting was called to petition the British Government for complete trial by jury in all the Courts and a representative Assembly. But next year an Act was passed in the Home Parliament establishing a Legislative Council

and further extending the privilege of trial by jury. These concessions failed to satisfy the colonists. Postal communication in this year was established throughout the colony. During the succeeding year the Governor continued to be bitterly assailed for his alleged improper administration, but he found some sympathisers among the wealthy colonists. A personal attack upon the Governor by a disappointed applicant for a land grant was made the pretext for the display of much party feeling. In this year Circuit Courts were established. The new Legislative Council commenced its duties and passed a Jury Bill which dealt with the question in a tolerably satisfactory manner for the time. A division was effected between the duties of barristers and solicitors. An exploring expedition into the interior was undertaken by Captain Sturt who discovered the Darling River. An enactment establishing Courts of Requests was passed by the Council.

The affairs of the colony excited great attention in the mother country during 1830, and its condition was discussed in Parliament, to which more petitions for trial by jury and constitutional government were addressed. Captain Sturt explored the Murrumbidgee District, following that river to its junction with the Murray, and proceeding down that stream to its confluence with the Darling, and thence to Lake Alexandra. Bushranging about this time became prevalent, and was with difficulty put down. A road was con-

structed from Sydney to the Hunter River. On the accession of King William the Fourth, the condition of the colony as a penal settlement was brought under his notice in a congratulatory address, and circumstances occurred in the same year which disposed the colonists to desire the cessation of transportation. The first steamer employed in the colony was brought out from England. An immigrant ship arrived with females only about the middle of the year, and shortly after another ship with mechanics, under the guidance of Dr. Lang. Governor Darling, having been recalled, took his departure from the colony on 21st October, 1831, leaving Colonel Lindsay in charge as Lieutenant-Governor. Towards the end of the year, an exploring expedition to the north was undertaken by Sir T. Mitchell, who discovered the Namoi, Gwydir, and Karaula rivers.

The new Governor, Sir R. Bourke, arrived in Sydney on 2nd December, and was enthusiastically received. Coal was exported from Newcastle in considerable quantities before the end of the year. When the Legislative Council met, early in 1832, Bourke submitted several measures which gave the colonists practical control over the legislation and finances of the country, and provision was made for the promotion of immigration. The proceedings of the Legislature were, for the first time, published in the newspaper press. These concessions gave great satisfaction. A movement, set on foot to obtain equality among all

religious denominations in the colony, met with some encouragement. In the British Parliament another attempt to secure an elective Legislative Assembly was made, but without success. In the following year, an agitation in favour of the same privilege was initiated in the colony, together with a vigorous attempt to reduce the expenditure from public funds. The question of the right of freed persons to serve on juries was decided about this time in their favour. The grievances of the prisoner and ticket-of-leave portion of the population having excited attention, measures were taken to ameliorate their condition. The Governor experienced some amount of unpopularity in 1834, from the mode in which he arranged for the employment of assigned servants from the prisoners in the colony. The revenue of the colony continued to increase, and large sums were expended in public works and in the provisions for the administration of justice, for religion, and for the education of the people. Both within and without the Legislative Council, a strong desire for economy was manifested. Strenuous opposition was also offered to the view of the Secretary of State that the land revenue belonged to the Crown. Efforts were made in England to secure regular postal communication with New South Wales. The principal event of the year 1835 was the exploration of the Bogan and Darling rivers by Sir T. Mitchell. The proposal to defray the expenses of the penal establishments from the

colonial revenue instead of from the funds of the mother country met with much opposition. Catarrh in sheep first made its appearance in this year. A plan for promoting immigration was submitted to the Legislative Council, and the first steps were taken to procure the cessation of transportation to the colony.

In 1836, Sir T. Mitchell made a further exploration of the Lachlan, Murrumbidgee, Murray, and Darling, and examined the country now forming the colony of Victoria as far as Portland Bay. The party opposed to the Governor made representations concerning the state of the colony and its unfitness for free institutions, which were contradicted by a petition in his favour, in which the necessity for the establishment of a representative Assembly was again urged. In this year, a Police Magistrate was appointed at Port Phillip, where a flourishing settlement had been formed chiefly by colonists from Tasmania. The Church Act, by which aid was given to the four leading denominations of Christians in the colony, was passed in this year, and Bourke also proposed the introduction of the National System of Education as it was carried out in Ireland. This proposal was strongly opposed by Dr. Broughton, the Church of England Bishop, and his supporters. Towards the end of the year, the colony of South Australia was founded, by which step all that portion of New South Wales lying between the 132nd and 141st degrees of east longitude was deducted from its territory.

Governor Bourke tendered his resignation in January, 1837. The colony continued to prosper. The Port Phillip district was thrown open for settlement and was rapidly occupied, and before the end of the year postal communication between Sydney and that part of the colony was established. Bourke's resignation was accepted in September, and he left the colony, deeply regretted, on the 5th of the following December. A statue of the Governor was erected by public subscription among the colonists.

CHAPTER V.

ADMINISTRATION OF GOVERNORS GIPPS AND FITZROY.

LIEUTENANT-COLONEL SNODGRASS discharged the duties of government, with the title of Lieutenant-Governor, from the date of Sir R. Bourke's departure to 23rd February, 1838, when his successor, Sir George Gipps, arrived. The questions of immigration and transportation attracted much public attention in this year. Eight men were executed for the savage murder of twenty-eight aborigines at Myall Creek. Next year the Governor proposed to extend the provisions for elementary education, and advocated the introduction of the Irish National System. It was proposed to make New Zealand a dependency of this colony. A

severe drought, from which the colony suffered, made the necessaries of life very dear. Bushranging became very common towards the end of the year, and at the commencement of 1840. The claims of persons who had purchased land in New Zealand from the natives having been discountenanced by the Governor, much ill-feeling was manifested on that account. An Act was passed for the protection of insolvent debtors, and it was proposed to establish a municipal corporation in Sydney. A steamer began to trade between Sydney and Melbourne.

In 1841, an agitation was commenced for the separation of the Port Phillip district from New South Wales. Pecuniary difficulties hindered the prosperity of the colony in this year. A proposal by the Council to borrow a million of money for immigration purposes was strongly opposed by the people as creating a national debt, and was not carried out. A serious riot occurred in Sydney, in which some seamen from a man-of-war lying in the harbour took a prominent part.

Next year, Governor Gipps was censured by the Home authorities for alleged injudicious proceedings in regard to immigration. The inhabitants of Sydney again petitioned the Queen for the boon of responsible government. The bill to incorporate Sydney having again been introduced into the Council, efforts were made by some of the residents to oppose it. The bill became law, and the first Municipal Council was

elected in November, 1842. Disputes between the Government and the tenants of pastoral lands belonging to the Crown became very bitter during this year. The Richmond River was discovered, and tobacco was first manufactured.

The year 1843 is distinguished for the introduction of representative institutions. By an Act of the Imperial Parliament, a Legislative Council was established, to consist of fifty-four members, of whom thirty-six were to be elected. Some of the provisions of this Act called forth a strong opposition from the people. The colony still suffered from monetary depression. The new Legislative Council met on 1st August, and proceeded to consider measures for the benefit of the colony. The process of boiling down sheep and cattle for their tallow was found to be highly remunerative, and gave great relief to owners of pastoral property, who had hitherto been in need of money. The condition of the working-classes continued to be one of great distress, and no effectual means of relief were discovered. In 1844, the disagreement between the Government and the "squatters" became still more embittered by the promulgation of new regulations as to the terms on which licenses to rent Crown lands for pastoral purposes were to be issued. In the Legislative Council the grievances of which the colonists complained were warmly discussed. These grievances were connected with the imperfect control exercised by the Legislature over the revenue of the

colony. A committee of the House having been appointed to report on the subject of primary education, recommended the adoption of the National System introduced into Ireland by Lord Stanley. In this year, Leichhardt started on an exploring expedition from Moreton Bay to Port Essington.

Next year, the natives of New Zealand commenced hostilities against the settlers established at the Bay of Islands which, in consequence, had to be abandoned. Much interest was felt in this matter by the people of New South Wales. The Council, in its annual session, petitioned Parliament to permit Australian wheat to be imported into England on the same terms as Canadian wheat. A similar petition was adopted at a public meeting of colonists who appeared to attach much importance to this matter. Another expedition to explore the northern territory was decided upon, Sir T. Mitchell being appointed leader. In this journey, which occupied twelve months, the country about the rivers Narran, Balonne, Culgoa, Maranoa, and Belyando was explored, and the Victoria River was discovered. In January, 1846, the first steps were taken towards the construction of a railway, and the Great Southern and Western Railway Company was formed shortly after. About the same time public attention was again directed to the desirability of obtaining steam communication with England. In the Council, the Governor's opening speech was not well received, and a misunderstanding grew up, which

resulted in the sudden prorogation of the House before any business was transacted. Governor Gipps relinquished office shortly after, and left the colony on 10th July. For a few weeks the government was administered by Sir Maurice O'Connell who retired on the arrival of the new Governor, Sir Charles FitzRoy, on the 3rd August.

A proposal to renew transportation to the colony was received with general disapproval. The question was subsequently revived from time to time, and eventually caused a strong feeling of antipathy to be manifested against the Secretary of State for the Colonies, by whom the proposal was made. The Council viewed the scheme more favourably than the public, and shared, in some measure, the odium with which its originator was regarded. The agitation thus commenced extended into 1847 and, together with the question of immigration, occupied the minds of the colonists. In this year, the Council was invested with fuller control over portions of the colonial revenue. It was also intimated that the Home Government intended to make some alterations in the constitution of the colony, and to erect the Port Phillip district into a separate colony. After an unsuccessful attempt to examine the country between his former route and Mitchell's, Leichhardt set out upon an expedition to the Victoria River, intending afterwards to proceed across the continent to Swan River. From this expedition he never returned. The exploration of the

Victoria River by Kennedy, in the same year, was entirely successful.

Early next year, the railway project was again discussed. Provision was made for the advancement of primary education by the appointment of the Denominational School Board, and by the appointment and incorporation, by an Act of the Council, of the Board of National Education. The mode in which it was proposed by the Secretary of State to alter the constitution excited general dissatisfaction, and the feeling was further increased by his suggestions as to the renewal of transportation. It was afterwards found, however, that the colonists themselves were to decide upon the nature of the new constitution. Kennedy, having been sent to explore the Cape York Peninsula, was killed by the aborigines.

In 1849, much indignation was aroused in the minds of the colonists by the announcement that transportation would be renewed, and great public demonstrations of disgust took place. Numerous petitions to the Queen, deprecating the measure, were adopted and transmitted to England. A new Legislative Council was called together in the early part of the year. The proposed new constitution, steam communication, and transportation were the principal subjects discussed in the House. The arrival of a ship with prisoners, sent out in defiance of the remonstrances of the colonists, and in total disregard of pledges to the contrary, created a feeling of bitter animosity

against the Secretary of State for the Colonies, Earl Grey. A committee of the Council reported that the Sydney Corporation had failed in its duty, and recommended its abolition. Later, another committee, appointed at the instance of Wentworth, suggested the establishment of a University. The Sydney Railway Company was incorporated by an Act of the Legislature. Gold having been discovered in California, large numbers of people emigrated to that country.

In 1850, further representations were made to the Home authorities with reference to the nature of the constitution desired for the country. From a despatch of the Secretary of State, it was found that transportation was not to be discontinued, although limited for the time to Moreton Bay. It was further notified that the Imperial troops would be withdrawn unless provision were made from the colonial revenue for their maintenance. The Legislative Council having met in the month of June, discussed the questions of transportation, the management of the police force, and colonial patronage. In reference to this last subject, the Council affirmed that appointments to offices in the colony should be made by the local Government. An Act for establishing the Sydney University was passed in this session. The first turf of the Sydney and Parramatta Railway was turned. A despatch from the Governor to the Secretary of State respecting anti-transportation meetings having been published, great excitement arose, an indignation meeting was

held, and the Governor became very unpopular among a large portion of the community. Other meetings were held on the subject; and at a very important assemblage of about six thousand persons, a petition to the Legislative Council against the resumption of transportation was adopted. Similar petitions were received from other parts of the colony. Towards the end of the year, the Act for the better government of the Australian colonies, passed by the Imperial Parliament, was received. By this Act, among other matters, the Port Phillip district was constituted a separate colony, under the name of Victoria. The boundaries of the new colony were the same as those now existing. The Queen was also empowered to create a new colony to the northward by detaching from New South Wales all the territory north of the thirtieth parallel of south latitude. Further powers were also conferred upon the existing Legislature to alter the constitution in such a way as to give a much larger measure of self-government than had yet been permitted to the colonists.

In January, 1851, Victoria was formally separated from New South Wales. The feeling against the renewal of transportation became daily stronger and more bitter. Delegates from the south-eastern colonies met at Melbourne and issued an address to the colonists and to the people of the United Kingdom, and a general Anti-transportation League was formed to carry on the agitation. The Legislative Council,

on the motion of Wentworth, adopted a remonstrance against the new Act of Parliament, which was denounced as a withholding of constitutional rights, a disappointment of reasonable expectations, and a refusal of repeated requests. The discovery of gold in the vicinity of Orange at this juncture led to changes in the political, as well as material, condition of the colony, which rendered easy the settlement of the questions that had previously been agitated, and paved the way to an effectual redress of grievances. The precious metal was soon after found in other parts of the colony. One of the first effects of this momentous discovery was the general unsettling of the minds of the working classes, and the withdrawal of large numbers from their ordinary pursuits. A considerable rise in the cost of labour of all kinds was the immediate consequence, accompanied with a proportionate increase in the price of all articles of general consumption. As it appeared that the Minister for the Colonies still persisted in his design to obtain from the Legislative Council a vote in favour of his views as to transportation, the League renewed its agitation. The new Legislative Council having met, Sir C. FitzRoy announced that he had been appointed Governor-General of all the Australian colonies. The Council finally resolved that transportation ought not to be resumed to any portion of the colony. A despatch was shortly after received, by which the question was virtually set at rest as regarded

New South Wales. The Council adopted resolutions in favour of immigration, and the establishment in Sydney of a branch of the Royal Mint. On the motion of Wentworth, petitions to the Queen and Parliament in favour of constitutional government, were adopted by the Council.

Strenuous efforts to procure the abolition of transportation to all the Australian colonies were made by the League in 1852. An expedition in search of Leichhardt returned unsuccessful. The Legislative Council met in the month of June, and one of its first proceedings was the appointment of a committee to prepare a constitution for the colony. This committee recommended that the Imperial Parliament should be invited to pass an Act empowering the Queen to assent to two Bills to be enacted by the local Legislature, one of which was entitled "An Act to confer a Constitution on New South Wales," and the other "An Act to grant a Civil List to Her Majesty." These measures were not considered till next session. Wentworth, the prime mover in the matter, endeavoured however to secure to the Council control over the gold revenue, which was voluntarily conceded by the Home Government before the debate was concluded. A great flood, attended with fearful loss of life, occurred at Gundagai in the month of June. In August, steam communication with the mother country was initiated by the arrival of the first ocean-mail steamer, the *Chusan*, belonging to the Peninsular and

Oriental Company. The Sydney University was inaugurated in October. The steamer Great Britain arrived in November.

The most important incident in the year 1853 was the passing of the Constitution Act. Some of the provisions of this Act were strongly opposed by a party in the Legislative Council and by a large section of the general public. As finally passed, the Act provided for the establishment of two legislative chambers. The "Assembly" was to consist of fifty-four members, to be elected for five years; its functions were to be similar to those of the House of Commons. The "Council," which the advocates of the Act intended to be a counterpart of the House of Lords, was to be composed of twenty-one members, to be appointed by the Governor-General for five years, and if not removed on the expiration of that period to retain their seats for life. While considerable dissatisfaction was manifested with this Act by a large number of people, its authors, Wentworth in particular, claimed for it that it conceded all rights, and redressed all grievances formerly in dispute with the Home authorities; that it conferred full powers of legislation upon the local Parliament, extended the franchise, and placed the whole revenue of the country under the control of the Legislature; and that it established responsible government. Another Act of some importance, passed in this year, was the measure by which the Sydney Municipal Corporation was abol

ished, and three Commissioners appointed to perform the duties. The consent of the Home Government to the establishment of a branch of the Royal Mint in Sydney was notified this year.

The declaration of war against Russia in 1854 led to the adoption of means for the defence of Sydney. The City Commissioners began their labours. Mr. Deas Thomson who had for many years held the office of Colonial Secretary, and Wentworth were appointed by the Council to proceed to England for the purpose of watching the passage of the Constitution Act through the Imperial Parliament. The Council granted aid towards the establishment of affiliated colleges in connection with the Sydney University. The Grammar School at Sydney was founded and endowed. Commissioners were appointed to inquire into the condition of the primary schools of the country supported by public funds.

An Act was passed enabling the Government to purchase the railways that had been commenced, and to carry them on as national undertakings.

Sir Charles Fitzroy retired from the office of Governor-General on 17th January, 1855, and was succeeded by Sir William Denison who had been Governor of Tasmania.

CHAPTER VI.

ADMINISTRATION OF GOVERNOR DENISON.

THE party opposed to the new Constitution Act continued their efforts to bring about a modification of that measure, and sought to attain their object by petitioning the Governor-General to dissolve the Legislative Council in order that a newly-elected Legislature might again discuss the question as to the best form of constitution for the country. The Governor, however, declined to accede to the request. The "Patriotic Fund" for the relief of the widows and orphans of soldiers killed in the Crimean war was well supported in New South Wales, the contributions having exceeded £30,000. When the Council met, various important measures were submitted by the Governor, including an Education Bill, the extension of railways, and the defence of Sydney. An exploring expedition was despatched under Mr. Gregory to start from the Victoria River and penetrate into the interior of the continent, and, if possible, to discover Leichhardt's track and ascertain his fate. The railway to Parramatta was opened in September. Sir T. Mitchell died early in the following month. Serious complaints were made of the mode in which the sewerage works in Sydney had been executed, and of the

alleged overcharges made by the contractors. The blame in this matter was imputed to the City Commissioners. The Imperial Parliament having passed the Constitution Act, the Governor informed the Legislative Council which was finally prorogued in December.

Practical effect was given to the Constitution early in 1856, by the formation of a responsible Ministry, of which Mr. Stuart Donaldson was Premier. The Legislative Council was dissolved, and the members of the two legislative bodies provided by the Constitution Act were appointed or elected. During the first session of the new Parliament, little was effected in the way of practical legislation, time having been consumed in struggles for power among the leading politicians. No less than three Ministries successively took office within six months. The Donaldson Ministry was followed by another under the leadership of Mr. Cowper, and that again was superseded by a third under Mr. Parker. A further protest against the revival of transportation to any part of Eastern Australia was passed by the Assembly. In 1857, the Constitution Act was amended by the repeal of the provision requiring the assent of a majority of the members of the Council, and of two-thirds of the members of the Assembly to any alteration. A Municipal Corporation was again established in Sydney, and Acts were passed for the management of gold-fields, and for the establishment and regulation of electric telegraphs.

Another change of Ministry occurred, Mr. Cowper having again assumed office. The Assembly was dissolved on 19th December.

Elections for the new Assembly were to take place immediately. While these were in progress (January, 1858), Mr. Plunkett was dismissed from office as Chairman of the Board of National Education by Mr. Cowper. The excuse for this step was the publication of official correspondence in the newspapers by Mr. Plunkett, and of reflections upon Mr. Cowper contained therein. The matter was discussed in the House of Assembly on its meeting, but no very decided conclusion was arrived at. The principal business of the session was the passing of an Electoral Act which embodied the principles of manhood suffrage and vote by ballot. Other important questions dealt with by the Assembly, were the establishment of municipal institutions and of District Courts, and the construction of railways by the Government. The electric telegraph was so far extended through the country as to place Sydney in communication with Melbourne and Adelaide. Alpacas were introduced from South America.

The elections under the new Electoral Act occupied the early part of 1859. The northern portion of the country, commonly known as Moreton Bay district, was erected into a separate colony under the name of Queensland. When the new Assembly met, this matter was warmly debated, many of the members being of opinion that

the step was premature and inexpedient. An Education Bill, introduced into the Assembly by Mr. Cowper having been rejected, the Ministry resigned and were succeeded by a Government of which Mr. Forster was Premier. Mr. Cowper thereupon announced his intention to retire from public life. The new Ministry introduced measures to make the Legislative Council elective and to deal with the public lands. These measures were discussed in the Parliament which continued in session until 1860, and were finally rejected. The Ministers thereupon resigned. A nother Ministry, under the leadership of Mr. Robertson, succeeded. Complaints were made by the working classes of the difficulty of obtaining employment, and an attempt was made by some of the unemployed to intimidate the Assembly when discussing the means of remedying this evil. Great floods devastated large portions of the country. Gold was discovered at the Snowy River. The Assembly was dissolved in November, 1860, and as the necessary elections immediately followed, Parliament met early in January, 1861. In the same month, the Governor retired from office, and the administration was assumed temporarily by Lieutenant-Colonel Kempt, the Commander of the Forces.

CHAPTER VII.

ADMINISTRATION OF GOVERNORS YOUNG AND
BELMORE.

EARLY in 1861, Mr. Cowper assumed the position of Premier. The Burrangong gold-field having proved to be highly auriferous, attracted a large number of miners, European and Chinese. The former arrogating to themselves the sole right to seek for gold, determined to drive away the Chinese, and attacked them with brutal violence. As the diggers had armed themselves for further assaults, the Government despatched troops to the scene of disturbance, and Mr. Cowper followed shortly after. During his brief stay, the Chinese were not molested, though they subsequently petitioned Parliament for compensation for damage sustained in the riots. Sir John Young, the newly appointed Governor-in-Chief, arrived in March. Floods devastated the Coast District for some months. In May, Messrs. Parkes and Dalley were appointed to visit England for the purpose of giving information respecting New South Wales, in the hope that immigration would be promoted thereby. Next month the troops were withdrawn from Burrangong, and the diggers immediately after made a savage onslaught upon the Chinese. This necessitated the

return of the troops, especially as, in the meantime, the police and the diggers had come into collision. A meeting of persons who sympathised with the diggers in their lawless proceedings was held in Sydney. Some of the ringleaders in the riots were arrested and subsequently brought to trial. About the same time bushranging became common. The insufficiency of the means at the disposal of the Government for asserting the supremacy of the law, or the unwillingness of the Executive to use them with effect, created an impression among certain classes that crime might be committed with little risk of detection or punishment, and for several years the country was infested by gangs of bushrangers who plundered, and sometimes murdered, almost without hindrance. Although these marauders were eventually all shot or captured, their long exemption from punishment reflected discredit upon the administration and the country.

The legislative measures passed in this year were, next to the Constitution and Electoral Acts, the most important ever enacted in the country. The Acts for dealing with the public lands entitled, respectively, the "Crown Lands Alienation Act," and the "Crown Lands Occupation Act," were specially important. The former, among other provisions, enabled a purchaser to select land before survey and, subject to certain conditions, to defer payment. This Act, commonly known as the *Free Selection Act*, was taken advantage of by large numbers of persons who desired

to settle upon the land, and whose payments added materially to the revenue. The other Act dealt with the leasing of Crown lands for pastoral purposes. Acts relating to the Gold-fields and to the Police were also passed. An Act to regulate Chinese Immigration, though passed ostensibly as a fiscal measure, was doubtless the result of the antipathy to those people which widely prevailed at the time. The practical effect of the Act was to exclude them from the country. By an Act of the Imperial Parliament, the territory lying between the western boundary of South Australia and the 129th meridian of east longitude, was detached from New South Wales and annexed to the former colony.

Floods and storms again devastated the Coast District in the early part of 1862. Bushranging kept the interior of the country in continual excitement. Parliament re-opened in May. The death of Prince Albert having become known, steps were taken to do honour to his memory. Meetings were held for the purpose of collecting funds for the relief of the operatives in England who, through the civil war in America, were deprived of employment. Messrs. Parkes and Dalley were recalled by Parliament in June. In the same month, a gang of bushrangers attacked the Gold Escort from the Lachlan, and stole gold to the value of £14,000. An Education Bill, introduced by Mr. Cowper, failed to secure the support of members of the Assembly but some important measures were

passed. Among these may be mentioned the Act for the discontinuance of State Aid to Religion, and the "Lands' Titles Act" by which provision was made for declaring the titles to land and for facilitating its transfer. The Act for the regulation of Coal-fields was also of some moment.

In January, 1863, a branch line of railway to Richmond was commenced. An agitation was set on foot for the separation of the south-western part of the territory, and its erection into a separate colony under the name of Riverina. Bushranging still prevailed, and the Gold Escort was again attacked. On the meeting of Parliament in June, a motion censuring the Government on account of the prevalence of bushranging was lost in the Assembly, but some months after a ministerial crisis occurred and a Government was formed under the premiership of Mr. (now Sir James) Martin. Parliament continued its session until April, 1864, but the measures passed were comparatively unimportant, those of greatest consequence being the Act to provide a Superannuation Fund for the Civil Servants, and the Act to amend and consolidate the laws relating to seamen. Intelligence having arrived of the marriage of the Prince of Wales, the circumstance was made the occasion of great public rejoicing. The Maori war in New Zealand drew a considerable number of volunteers thither from New South Wales.

Bushranging and floods continued to distress the

country during 1864. The tariff proposed by the Ministry was received with great dissatisfaction. When Parliament met in October, the Ministry was defeated, and thereupon advised that the Assembly should be dissolved. The railway to Richmond was opened in November.

When the new Parliament assembled in January, 1865, the Ministry sustained another defeat, and resigned. Mr. Cowper again took office. Next month, large rewards were offered by the Government for the apprehension of the bushrangers whose depredations had, up to this time, been unchecked. This step was followed soon after by another of even greater efficacy—the passing of a law to facilitate the apprehension of bushrangers, and for the punishment of those by whom they were harboured. The great necessity found to exist for increasing the revenue led to the passing of an Act to impose Stamp Duties and a charge upon imported packages. Other useful measures passed in this session were the Acts affecting Trade Marks, Fisheries, Drainage, Impounding, and Industrial and Provident Societies.

Kerosene shale was discovered in various parts of the colony during this year, and steps were taken to establish manufactories of kerosene oil.

Parliament again met in October, and passed Acts for imposing additional Customs' duties upon imports, the *ad valorem* duty being one. In January, 1866, the Government was defeated, and was replaced by

the second Martin Ministry. Drought and rust in wheat caused great loss to the colony in the early part of the year. A conflict between European and Chinese diggers took place at Forbes. A new gang of bushrangers commenced their nefarious practices in the Braidwood district. The statue erected to the memory of Prince Albert was inaugurated at Sydney. In July, a gale caused much damage and loss of life along the coast. When Parliament met at the end of that month, a number of Bills were submitted dealing with questions of social reform. Of these there were passed Acts for the Relief of Destitute Children, for the establishment of Juvenile Reformatories and Workhouses, for the Punishment of Drunkards, and for the Inspection of Hospitals and other public institutions. Another measure of the highest importance was the Public Schools Act by which provision is made for elementary education. The Act for the registration of Brands of Cattle and Horses also deserves mention.

The first Council of Education under the Public Schools Act was appointed on 1st January, 1867. The Border Duties formed the subject of discussion at a conference of the Governments of New South Wales and Victoria. Four persons specially commissioned to apprehend bushrangers in the Braidwood district, were murdered, and the Government thereupon called upon all loyal subjects to assist in the capture of the murderers. Shortly after, Commissioners were ap-

pointed to inquire into the state of crime in the district. The report of the Commissioners speedily led to action on the part of the Government, but bushranging continued to prevail until the month of April, when two of the most notorious criminals were taken, and, in due course, tried, convicted, and executed. From this time, systematic bushranging on a large scale ceased. Mr. Cowper retired from political life. A direct telegraph line from Sydney to Adelaide was opened. About the middle of the year, the country suffered greatly from storms and floods, in which many lives were lost. Preparations were commenced for the reception of His Royal Highness Prince Alfred who was expected to visit Australia. Several important measures were passed by the Legislature in this year. Among these were the Act to regulate the Volunteer Force, and the Act to establish Municipalities. The Chinese Immigration Act was repealed. Sir John Young retired from the government of the country and left Sydney on 24th December. On the same day, General Chute took office as Administrator of the Government, but relinquished it on 8th January, 1868, when the Earl of Belmore, the new Governor, arrived.

Shortly after Lord Belmore's entrance upon office, he assented to Acts for the care and treatment of the Insane, and for increasing the Contribution towards the Cost of providing Artillery Soldiers for service in New South Wales. On 21st January, Prince Alfred

arrived in Port Jackson and was received with great rejoicings. Public celebrations and festivities were continued for some days. The Prince subsequently visited Queensland and the Hunter District. On his return, an attempt to assassinate him was made by a man named O'Farrell who was subsequently executed for the offence. The Parliament, in consequence of this attempt, hastily passed a measure known as the "Treason Felony Act," which contained provisions of a very rigorous kind for the suppression of "seditious practices and attempts." On his recovery from the effects of his wound, the Prince, for whom general sympathy was felt, left Sydney to return home.

In May, the Western Railway was opened to Mount Victoria. In the month of September following, Mr. Parkes resigned the office of Colonial Secretary. When Parliament re-assembled in October, a vote was passed adverse to the Government, and the Ministry thereupon resigned. A new Ministry was formed, with Mr. Robertson as Premier. As soon as the new Ministry disclosed their policy, Mr. Parkes moved that the Government did not possess the confidence of Parliament, but the motion was negatived.

At the commencement of 1869, bushranging again became very prevalent, and continued to give trouble to the authorities for some months. The country suffered greatly about the same time from drought. In March, Prince Alfred again visited Sydney, remaining until the beginning of April. Next month, disastrous

floods occurred in the Hawkesbury River. Another noteworthy incident was the opening of the Northern Railway as far as Muswellbrook. In August, the United States war steamer Kearsage arrived in Port Jackson. Parliament met again at the end of September, but passed no measures of consequence, and two months after, the Assembly was dissolved. Near the close of the year, several British men-of-war vessels, forming the "Flying Squadron," arrived at Sydney.

In January, 1870, Mr. Cowper again joined the Ministry as Premier. The new Parliament was opened in February by Lord Belmore. The most important measure passed by the Legislature in this session was the Audit Act which provides for a more rigid scrutiny of public expenditure, and for the exercise of greater care in the collection of the public revenue.

The Western Railway was opened for traffic to Wallerawang. In March, heavy floods occurred in the Hunter and Hawkesbury districts, and subsequently in other parts of the country. Throughout the whole year, disasters from floods were common, nearly every district having suffered to a greater or less extent. Diamonds were found near Mudgee, and about the same time the Gulgong Gold-field was opened up. The news of the Franco-Prussian war having arrived, steps were taken to provide for the defence of the country and its capital. His Royal

Highness the Duke of Edinburgh again visited Sydney. A second session of the Parliament commenced in August. Towards the end of the year, the Government resigned and were replaced by a Ministry of which Sir James Martin was Premier. British soldiers were finally withdrawn from the country in the same month.



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